# Current Affairs, 26th January to 1st February, 2020

## International

## Running for President, the Democratic Way

The first set of elections in the Democratic Party contest in the United States to decide the Opposition party's presidential nomination is all set to take off in Iowa on February 3. What began as a crowded set of contestants has whittled down to close to half-a-dozen realistic hopefuls. Former Vice-President Joe Biden leads in nation-wide opinion polls, but rivals Vermont Senator Bernie Sanders, Massachusetts Senator Elizabeth Warren, former Mayor (of South Bend) Pete Buttigieg, Minnesota Senator Amy Klobuchar and insurgent candidate and billionaire businessman Michael Bloomberg are in contention. On the Republican side, U.S. President Donald Trump's re-nomination is a foregone conclusion as several States have already cancelled their primaries and caucuses, with the lack of a credible contestant. Other smaller parties in the U.S., the Libertarian Party and the Green Party, also hold primaries for their presidential nominees, but the party system is dominated by the Big Two: the Democrats and the Grand Old Party. A look at how the primaries work and what the process is to nominate the presidential candidate.

## What Are the Democratic Presidential Primaries All About?

The Democratic presidential primaries (including caucuses) are a series of electoral contests to decide the party's nominee for President. These are held over four months, beginning February 3 and ending on June 6, 2020. The contests are held in each State among the 50 in the United States, besides five U.S. held territories and Democrats Abroad (expatriate U.S. citizens), and conclude with the nomination of delegates from these constituencies for the candidates. These delegates will then represent the candidate in the Democratic National Convention (DNC) scheduled to be held at Milwaukee, Wisconsin between July 13-16, 2020. The delegates would, by pledged votes, elect the Democratic Presidential nominee. The candidate who wins a majority of the approximately 3,979 delegates overall, is declared as the nominee. Apart from these nominated delegates from the election process, the Democratic Party, through its leadership (elected members of the Democratic National Committee among others) and elected officials (Congressional representatives, Governors and distinguished party leaders), also appoints 771 superdelegates. This has been part of the Democratic nomination process since 1984. These unattached superdelegates, prior to the ongoing primaries, were allowed to freely vote for any candidate in the first ballot at the DNC. Following complaints about the undue influence of these unelected delegates from the State primaries, the Democratic National Committee changed the rules in August 2018 and limited the influence of superdelegates. They are now prevented to vote on the first ballot and could vote only in a contested nomination, i.e. in a situation where no candidate enjoys a clear majority after the first ballot. Superdelegates are, however, allowed to publicly endorse a candidate of their choice before or during the convention.

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## When and Where Do the Primaries Began?

Traditionally, the first electoral contest in the presidential primaries for both the Republican and the Democratic parties have been held at Iowa, situated in the American mid-west region. This time the Iowa caucus for the Democratic party is set to be conducted on February 3. Despite a relatively low population and an electorate that is not entirely representative of the Democrats' countrywide base, the strong media attention and the kick-off factor catapult the Iowa caucus into a measuring stick for the candidates in the fray. Iowa contributes 41 pledged delegates overall and is followed by the New Hampshire primary that is to be held on February 11. The important day to look out for during the primaries is March 3 (Super Tuesday) when 14 States and one Territory and Democrats Abroad (for a total of 1,357 delegates) go to the polls. Normally by Super Tuesday, the fringe candidates would be out of the fray. The other key day of contests is April 28, featuring primary elections to six States and for a total of 663 delegates. The clear front-runner leading up to the convention could already be decided by the end of these primaries.

#### What Is the Difference Between A Primary and A Caucus?

Primary elections are conducted by State/local governments, while caucuses are gettogethers/events that are run by the political parties themselves. Primary elections feature a secret ballot, where registered voters (affiliated to the parties) register their ballot and leave. Caucuses on the other hand involve the physical presence of voters who conduct debates and discussions among themselves and then divide themselves on the basis of their support to candidates. The allocation of delegates is done based on the relative support for the candidates. Primary elections and caucuses can be "open" wherein any registered voter, irrespective of party affiliation can vote in the contest, while in closed primaries only voters registered and affiliated with a particular party are allowed to vote. Among the Democratic candidates, Senator Sanders is expected to do better in the more discursive caucuses due to a stronger and more dedicated activist base. This advantage is relatively nullified in closed primaries where candidates are required only for voters to turn out and register their votes.

# **How Are Delegates Awarded?**

In the Democratic elections, delegates are awarded in proportion to the votes garnered by the candidates in primary elections and relative strengths of presence/support registered in caucuses. Among Republicans, however, some States have a "winner-takes-all" proviso that allows for candidates to reap in all the delegates if they win a majority of the votes.

# How Are the Candidates Judged?

U.S. voters tend to evaluate presidential candidates over a number of qualities: ideological positions on various issues, persona, experience or freshness and other leadership traits. The widely televised presidential primary debates (followed by the presidential debates after nominations are secured) allow voters to slice and dice information on candidates on these qualities. The Democratic National Committee has provided for a total of 12 primary debates, seven of which have already been held so far. Candidates who win a substantive number of delegates in the early polls, and have a strong war chest due to donations (in the case of the Democrats, much of the fund raising is through grassroots crowdfunding) or in the case of Mr. Bloomberg, his personal wealth; are expected to stay longer in the fray.

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## U.S. House Warns China Not to Meddle in Dalai Lama Succession

→ The U.S. House of Representatives voted to authorise sanctions against Chinese officials who interfere in the process of determining the Dalai Lama's successor, raising pressure as the Tibetan spiritual leader approaches 85. Under the legislation, Washington would freeze any U.S. assets and ban travel to the United States of Chinese officials found to be involved in "identifying or installing" a government-approved Dalai Lama. A total of 392 lawmakers voted for the Bill with 22, all of them Republicans plus one conservative independent, opposed. The Act still needs approval from the Senate, where Republican Marco Rubio has promised to lead efforts, before heading to President Donald Trump for his signature. The law would also prohibit China from opening any further consulates in the U.S. until Washington can open a mission in Lhasa, the Himalayan territory's tightly restricted capital. Speaker Nancy Pelosi, a long-time advocate for Tibet, said that the Bill aims to encourage Beijing to resume dialogue with envoys of the Dalai Lama that broke off a decade ago. Beijing slammed the U.S. over the Bill, saying it "grossly interferes in China's internal affairs". The Foreign Ministry urged the U.S. to "do more to benefit mutual trust and cooperation between China and the U.S. rather than the contrary".

## Trump's Israel-Palestine Peace Plan

President Donald Trump's Middle East plan, Peace to Prosperity: A Vision to Improve the Lives of the Palestinian and Israeli People, has been praised by Israel's Prime Minister Benjamin Netanyahu as a "realistic path to a durable peace", but rejected by President Mahmoud Abbas of the Palestinian Authority as a "conspiracy deal" to which "we say a thousand times over: no, no, no". Observers have said that the deal, which was drawn up without any meaningful Palestinian participation, is loaded in Israel's favour. It gets unified Jerusalem as its capital, and it does not have to dismantle any of its illegal settlements in the West Bank. To the Palestinians, the deal offers the possibility of a US-recognised quasi sovereign state that will not, however, have a standing army; they will also have to give up violent resistance to Israel, and ensure the disbandment of Hamas, which governs Gaza. Trump has claimed that "it is only reasonable that I have to do a lot for the Palestinians, or it just wouldn't be fair", but also warned that "this could be the last opportunity they will ever have". Presidential son-in-law Jared Kushner, the main architect of the plan, has said that the Palestinians should "stop posturing" and fall in line, because "it's a big opportunity" for them "and they have a perfect track record of blowing every opportunity they've had in their past". Democratic presidential hopefuls Bernie Sanders and Elizabeth Warren have denounced the plan as "unacceptable" and a "sham". Critics have said the real intention could be to change the start point of future negotiations — the Palestinians will begin with a disadvantage, and be forced to fight to simply hold on.

## Status of Jerusalem

Both Israel and the Palestinians make non-negotiable claims over Jerusalem. The plan says Jerusalem will not be divided, and it will remain "the sovereign capital of the State of Israel". The capital of Palestine can occupy far-flung eastern neighbourhoods lying beyond "the existing security barrier", which can be renamed Al Quds, the Arabic name for Jerusalem. According to the plan, "Jerusalem's holy sites should be subject to the same governance regimes that exist today", and "should remain open and available for peaceful worshippers

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and tourists of all faiths". During the 1967 war, Israel seized control of East Jerusalem, which has Temple Mount, home to the Western Wall, the al-Aqsa mosque and Dome of the Rock. To Israel, Jerusalem is its undivided capital, and the US moved its embassy to the city from Tel Aviv in May 2018 — but very few countries recognise it as such. The UN has condemned the Israeli annexation of East Jerusalem. President Abbas has declared that "Jerusalem is not for sale". This proposal alone has enough potential to make Trump's plan a non-starter.

#### **Change of Borders**

The White House has released a "conceptual map" that it says meets Israel's security requirements, allows Palestinians "significant territorial expansion", and "avoids forced population transfers of either Arabs or Jews". However, the plan says that Israel "will not have to uproot any settlements, and will incorporate the vast majority of Israeli settlements into contiguous Israeli territory", and that "Israeli enclaves located inside contiguous Palestinian territory will become part of the State of Israel and be connected to it through an effective transportation system". The idea that illegal Israeli settlements in the West Bank should become legal and permanent will be difficult for the Palestinians to agree to. The plan says the Jordan Valley, "which is critical for Israel's national security, will be under Israeli sovereignty". It also says that Israelis will observe a four-year "land freeze", during which time the Palestinians can reconsider whether to engage in negotiations. However, Netanyahu has said that he would seek cabinet approval to annex the Jordan Valley and all Jewish settlements in the West Bank — a move that will likely be seen by the Palestinians as an escalation.

## Economic Package

The plan says it has the "potential to facilitate more than \$50 billion in new investment over 10 years", and could "fundamentally transform the West Bank and Gaza". It includes constructing essential infrastructure including "high-speed transportation links" between the West Bank and Gaza, promoting private sector growth, upgrading education, and improving the healthcare sector and the overall quality of Palestinian life. The New York Times quoted a White House official as saying the plan would create 1 million new jobs for Palestinians over 10 years, double the size of the Palestinian economy, cut poverty in half, and reduce unemployment to below 10%. The money would be supplied by international donors, chiefly in Arab nations, the report said.

→ It proposes to enlarge Gaza and swap the Arab-populated towns in southeast Israel with Palestine for parts of the West Bank. In effect, the Palestinians would lose roughly 30% of the West Bank, their claim to Jerusalem and the right to return of refugees. In return, they will get an independent state in a shrunken West Bank and an enlarged Gaza connected through a tunnel that would practically be encircled by Israel. It is true that the Palestinians' negotiation powers are at their weakest point. Their leadership is divided and the support they once enjoyed in Arab nations is also eroding. Representatives of the UAE, Bahrain and Oman were present at the event in Washington in which Mr. Trump unveiled the plan. Egypt also offered its support, while Saudi Arabia cautiously welcomed talks between Israel and Palestine. But on what conditions? It's hard to overlook the injustice in demanding that the Palestinians accept further annexation of the West Bank. Issues such as the status of Jerusalem and the right to return of refugees, an internationally accepted right, and the final borders should be resolved through talks, not by dictating terms to one party. Even to

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achieve statehood under the proposed conditions, the Palestinian Authority (PA) is required to crack down on Hamas and Islamic Jihad (which is practically impossible as both operate from Gaza and the PA runs only West Bank territories), stop supporting families of those jailed or killed by Israel and stop challenging Israeli actions on international fora. It is virtually impossible for any Palestinian leader to sell these proposals to a people who have been resisting Israel's occupation for decades. Under the current conditions, it looks more like a plan for further annexation of territories by Israel than one that seeks constructive and lasting peace.

## The Road to Genocide (Priyanjali Malik - London-Based Researcher)

→ The 27<sup>th</sup> of January marked the 75<sup>th</sup> anniversary of the liberation of Auschwitz, a date that is now observed as 'International Holocaust Remembrance Day'. Of the 5.5 million-6 million people killed in the Holocaust, about 9,60,000 are believed to have died at the Auschwitz complex. As we reflect on the millions who were 'exterminated' (a term usually associated with pest control) it might be worth recalling how the Jewish people were first isolated and ostracised and then stripped of their humanity. The 'Final Solution' claimed, by 1945, two thirds of Europe's Jewish population. However, as most historians agree, it is important to note that there was probably no single decision taken by the Nazis to rid Europe of its lewish population; instead, the 'Final Solution' was enabled by a series of incremental policies and pronouncements by the regime. If the horror of the emerging policies was apparent to those within and outside the country, it seems they chose to look away. The first stage was the identification and registration of all lews, which then enabled the confiscation of their property, followed by the passage of laws to circumscribe their citizenship, means of livelihood and access to legal remedies. The state-sponsored intimidation, impoverishment and alienation succeeded in driving out about 37,000 lewish people in 1933 alone. Later, the Nuremberg Laws of 1935 defined 'Jewishness' and 'German citizenship'. The first of the two laws clarified who was 'Jewish' and forbade intermarriage between Germans and Jewish people, in addition to disallowing the employment of German women under the age of 45 in Jewish households. German citizenship was defined by blood, and continually reaffirmed through 'conduct'. Together, these laws completed the segregation and stigmatisation of an entire community. This culminated in Kristallnacht, the Night of Broken Glass, in November 1938, when Nazi paramilitaries and civilians attacked Jewish homes, hospitals and synagogues, while German authorities looked on.

#### Constant Demonization

Those that did not or could not emigrate were driven into ghettoes following the Nazi invasion of Poland in 1939. The ghettoes allowed Nazi functionaries to efficiently round up whole families for concentration camps by 1941. All the while, the demonization of Jews ensured that they began to be considered 'subhuman', a phrase used by Field Marshal Walter von Reichenau in 1941 in his now infamous 'Severity Order'. Thus, having stripped them of their humanity, the regime moved with clinical efficiency to annihilate the Jewish people. Reichenau's carefully phrased term "severe but just retribution" was code for killing, and similar versions were circulated amongst different commands. This led to one of the most brutal phases in the Holocaust whereby Einsatzgruppen, or Nazi death squads, in collaboration with the Wehrmacht and local auxiliary units in German-occupied territories in Poland and the Soviet Union rounded up and shot 1.3 million Jews. Initially, the squads

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gathered Jewish men and boys, along with members of the intelligentsia and political opponents (not all of whom were Jews). They were then executed on various trumped-up charges. Over time, the fig leaf of cause was discarded; simultaneously, the net was widened to include women and girls. Compounding the tragedy was the fact that the Einsatzgruppen were assisted by locals, often in a ratio of 10 locals to 1 paramilitary. The invading Germans were also successful in instigating locals to riot against Jewish people as they marched into newly captured territories; in the six months following the invasion of the Soviet Union in June 1941, over 60 pogroms in Latvia, Lithuania and Ukraine claimed about 24,000 Jewish lives. However, the shootings were proving inefficient and costly. When the 'Final Solution' was agreed to in January 1942, the numbers were too great and army commanders were complaining that the shootings were affecting soldiers' morale. And so, the logical next step was to industrialise the killings, using the gas chambers. Historians estimate that of the 1.3 million who were sent to Auschwitz, 1.1 million died — most killed by gassing, the rest felled by disease, exhaustion or starvation. Those to be 'exterminated' were led to chambers, made to undress and sent into what looked like a shower room; once they were inside, the chamber was sealed and the cyanide released into it. Death occurred after some minutes of terror. The corpses were then harvested: the women's hair was cut, and dentists removed gold fillings from the teeth of the dead. By 1944, 10 kg-12 kg of gold was being harvested each month. The dehumanisation of the exterminated was complete. This is how death when dehumanised looks. It sullies us all. May we never forget.

# **Foreign Affairs**

## India Abroad

The European Union Parliament's discussion recently on India's Citizenship (Amendment) Act or CAA, is more proof of concern, particularly in the West, over the possible repercussions of the law and the protests across India. Parliamentarians in the U.K. and U.S. Congressmen, including Democratic presidential contenders, have asked India to "reconsider" the law and to "engage" with the protesters. The EU parliamentarians went a step further: putting out six different and extremely critical resolutions, including one that spoke of the possible risk by the CAA and the proposed National Register of Citizens, of creating "the largest statelessness crisis in the world". A sixth less critical resolution, but which worried about the "brutal crackdown" on protesters, was dropped. After India's intense diplomatic outreach, the parliamentarians agreed to put off voting on the resolution until after External Affairs Minister S. Jaishankar and Prime Minister Modi visit Brussels; according to the EU member requesting the postponement, India will address Europe's concerns. The government has called this a diplomatic victory, blaming Pakistan and also a British MEP with Pakistan occupied Kashmir origins for "strenuous efforts" to attack India in the EU Parliament. The hope is that with the U.K. scheduled to leave the EU on January 31, interest in the anti-CAA resolutions will wane. Finally, the government has held that the CAA is India's internal law. While the government is right about India's sovereign right, it would be deluding itself if it thinks any of these explanations are passing muster with the EU parliamentarians. The government diluted its own case against foreign interference when it facilitated a visit by EU MEPs to Srinagar last year, when even Indian MPs were not allowed to visit. By engaging the EU MEPs to avoid a vote in the EU Parliament this week, and offering to explain the reasons

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behind CAA, the government is slipping up further. New Delhi must also consider the impact of its repeated reference to Pakistan as the sole mover of any motion against it at world legislatures and fora. It seems a stretch that Pakistan, which is itself on international notice for terrorism and attacks on minorities, can bring such weight to bear. In the EU Parliament, 626 MEPs of the total 751 were members of the groups that originally drafted the six resolutions, and it seems unlikely that Islamabad could have achieved such a majority. Above all, the government must reflect on the cumulative toll on its diplomatic heft following international alarm over the CAA, plans for an NRC and the dilution of Article 370. Instead of pushing a positive agenda for India or handling global challenges, Indian diplomats seem to be overwhelmed keeping out any negative references to India at official fora.

## India's Imports of Palm Oil — Dynamics of The Trade with Malaysia

→ India has cut import duty on crude palm oil (CPO) and refined, bleached and deodorised (RBD) palm oil, and also moved RBD oil from the "free" to the "restricted" list of imports. While curbing oil imports has been under discussion since the Budget presented in July 2019, the move has been construed as retaliation against Malaysia's Prime Minister Mahathir bin Mohamad, who has criticised India's internal policy decisions such as the revocation of the special status for Jammu and Kashmir and the new citizenship Act. Malaysia has also been sheltering since 2017 the Islamic preacher Zakir Naik, who is wanted by India on charges of money laundering, hate speech, and links to terror.

#### Has India Banned Import of Malaysian Palm Oil Because Of Political Reasons?

Not really. The import of RBD palm oil has been restricted, not banned — and this is from all countries, not just Malaysia. Also, CPO can still be imported freely. Under the trade classification system that India follows, except for goods that can be imported only by state trading enterprises (such as Food Corporation of India), all goods whose import is not restricted or prohibited are traded freely. Normally, a special licence is required to import a restricted good. The government has neither specified what the restrictions entail nor issued any licences. However, it has been reported that vessels carrying RBD palm oil are stuck at several ports because buyers have been asked to shun the product.

# How Much Palm Oil Does India Import?

India imported 64.15 lakh metric tonnes (MT) of CPO and 23.9 lakh MT of RBD in 2018-19, the bulk of which was from Indonesia. Commerce Ministry data show India imported \$10 billion worth of vegetable oil in 2019-20, making it the country's fifth most valuable import after mineral oil (\$141 bn), gold (\$32 bn), coal (\$26 bn), and telecom instruments such as cell phones (\$17 bn).

# Why Does India Need So Much Palm Oil?

It is the cheapest edible oil available naturally. Its inert taste makes it suitable for use in foods ranging from baked goods to fried snacks. It stays relatively stable at high temperatures, and is therefore suitable for reuse and deep frying. It is the main ingredient in vanaspati (hydrogenated vegetable oil). However, palm oil is not used in Indian homes. That, and the fact that CPO continues to be imported, makes it unlikely that the decision to restrict refined palm oil imports will impact food inflation immediately.

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## Who Will Be Impacted by The Decision?

Indonesia and Malaysia together produce 85% of the world's palm oil, and India is among the biggest buyers. Both Indonesia and Malaysia produce refined palm oil; however, Malaysia's refining capacity equals its production capacity — this is why Malaysia is keen on exporting refined oil. Indonesia, on the other hand, can supply CPO, which would allow India to utilise its full refining capacity. The CPO that India imports contains fatty acids, gums and wax-like substances. Refining neutralises the acids and filters out the other substances. The filtrate is bleached so that the oil does not change colour after repeated use. Substances that may cause the oil to smell are removed physically or chemically. This entire process increases the value of a barrel of crude oil by about 4%. Additionally, there are costs to transporting the crude, which makes it more cost-effective to import the refined oil. But the refining industry has been demanding that the import duty on refined oil be increased, which would make importing crude oil cheaper than importing refined oil. The decision to restrict imports of refined oil will benefit refiners, which include big-ticket names like the Adani Wilmar group.

## Will Restricting Imports of RBD Palm Oil Help Farmers?

Restricting refined oil imports will not help farmers directly, as they are not involved in the process of refining. However, the restrictions have caused refined palm oil prices to increase. If prices continue to hold, farmers will get a better realisation for their crop. But the timeframe over which the changes in import policy will have an effect on domestic crop realisation is fairly long, given that palm trees take over four years to provide a yield. Also, if the demand is met entirely by importing and refining CPO, farmers will be left out of the picture.

## How Will Malaysia Be Affected?

Malaysia has said that it cannot retaliate against India because it is "too small". With imports to its largest market restricted (India bought over 23% of all CPO produced by Malaysia in 2019), Malaysian palm oil futures fell by almost 10% between January 10 and January 17, although it has recovered since then. India and Malaysia signed a free trade agreement — Malaysia-India Comprehensive Economic Cooperation Agreement — in February 2011. Under the agreement, India was required to reduce import duty on CPO to 37.5% (from 40%) by December 2019, and on RBD to 45% (from 54%) by December 31, 2018. In 2018, Malaysia exported 25.8% of its palm oil to India. If India does not issue licenses for importing refined oil, Malaysia will have to find new buyers for its product.

# **Nation**

# CAA Rules May Seek 'Proof of Religion'

→ The Citizenship (Amendment) Act (CAA), 2019, rules are expected to seek "proof of religion" as mentioned in government records, a senior official of the Ministry of Home Affairs (MHA) said. The draft CAA, 2019, rules are likely to seek documents from applicants that they entered India before December 31, 2014 and that they belong to the six religions exempted under the Act. The Assam government had requested the MHA to impose a three-month time limit to apply under the CAA and not keep it "open-ended". "Any of the applicants living in

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India before 2014 will have some government document or the other where they would have mentioned their religion, they will have to submit this as proof," said the official. The CAA has the provision to grant citizenship to members of six undocumented minority communities — Hindu, Sikh, Buddhist, Christian, Jain and Parsi from Pakistan, Afghanistan and Bangladesh who entered India before December 31, 2014. Though the Act does not mention "persecuted minorities", the term was included in the statement of objects when the Bill was introduced in Parliament. Many Opposition members had raised objections on means to prove that an applicant indeed was persecuted on religious grounds in the neighbouring countries. The official said the States would have no role in implementation of the CAA, as citizenship was the domain of the Centre. "The only hiccup will come during the verification stage when the role of local police comes into play, even that can be conducted by central agencies," added the official. Four State assemblies of West Bengal, Punjab, Kerala and Rajasthan have so far passed resolutions opposing the CAA. Punjab Chief Minister Captain Amarinder Singh had in an open letter on January 3 said the CAA could be misused for infiltration in the country as "any person claiming to be of the six religions could simply apply in terms of the amended law, prove entry on/before the cut-off date and be eligible for citizenship." An official said all applications under the CAA would have to be made online and the final decision to grant citizenship rested with the MHA. Several groups in Assam have opposed the CAA as it 'violates' the provision of the 1985 Assam Accord that called for "detection and deportation" of all persons who entered the State from Bangladesh post March 24, 1971. The Supreme Court-monitored Assam's National Register of Citizens (NRC), published on August 31 last, which excluded 19 lakhs of the 3.4 crore applicants, was a fallout of the Assam Accord. The CAA was passed by Parliament on December 11. The MHA notified that the provisions would come into force from January 10. The rules that will govern the Act are still under construction and yet to be notified by the Ministry.

# The Great Indian Citizenship Mess (Faizan Mustafa - Constitutional Law Expert; Aymen Mohammed - Research Scholar at NALSAR University, Hyderabad)

On January 22, the Supreme Court will hear 60-plus petitions challenging the constitutionality of the Citizenship (Amendment) Act (CAA). As a matter of fact, it is the apex court that is largely responsible for the current mess. Its Sarbananda Sonowal judgment (2005), which struck down the Assam-specific Illegal Migrants (Determination by Tribunal) Act (IMDT), was the turning point of the debate on 'illegal migrants'. Some observations made in the ruling bordered on the xenophobic and were filled with paranoia about 'outsiders'. Now, some of these 'outsiders will become beneficiaries if the court does not rule against the CAA. In the Sonowal judgment (2005), the Supreme Court struck down the Assam-specific Act that had put the burden of proof on the state rather than on the person alleged to be a foreigner. Without providing any evidence, the court went on to say that "unabated influx of illegal migrants from Bangladesh into Assam [had] led to a perceptible change in the demographic pattern of the State and reduced the Assamese people to a minority in their own State." The National Register of Citizens (NRC), monitored by the Supreme Court itself, has proved these fears to be exaggerated. Even if all the 19 lakh excluded people are considered 'illegal migrants', their composition as a proportion of Assam's population is just 4%.



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## CAA Is Territory-Specific

The CAA, just like the IMDT that was deemed unconstitutional by the Supreme Court, is territory-specific and exempts certain North-eastern States from its scope. The IMDT had created a separate regime for the determination of citizenship for Assam while a different regime would operate for the rest of India. The court in the Sonowal verdict had said that such geographical differentiation is admissible only if it has a rational nexus with the Act's objective. The court also ruled that the IMDT's objective, to reduce illegal immigration, was not served by enacting such a criterion for Assam alone, and hence the Act violated Article 14. It can be argued that in the case of the CAA also, the geographic differentiation exclusion of Inner Line Permit States/areas from its ambit — has no nexus with the overall objective of the Act, i.e., helping persecuted people. This makes the Act fall short of the criterion laid down in the Sonowal case. The court had then said that the territory-agnostic Foreigners Act was far more effective than the IMDT in the identification and exclusion of foreigners who had entered India illegally and had no authority to remain. It needs to be stated here that the Foreigners Act deals with 'foreigners', not with those whose names may have been excluded due to lack of documentation, for instance in the Assam NRC. Many of them could indeed be 'citizens. We must create separate citizenship tribunals under the Citizenship Act to examine such cases, placing the burden of proof on the state to justify their exclusion. A denial of citizenship, which is a 'right to rights', must be through a process that fair, reasonable, just and non-arbitrary. Foreigners' tribunals are nothing but kangaroo courts. It also becomes pertinent here to examine different types of awarding citizenship and the history of India's Citizenship legislation. Citizenship by birth, or jus soli, embraces all those who identify with a country. In contrast, jus sanguinis, citizenship based solely on descent, recognises that some races or ethnicities as 'national' and others are 'outsiders'. In postcolonial nations, such citizenship laws have provided grounds to render whole populations without rights and produced a constant stream of refugees into neighbouring countries. Myanmar's 1982 Citizenship Act was one such example that classified only some ethnicities as 'national', effectively outlawing the Rohingya people. While jus sanguinis is premised on a country harking back to an arbitrarily-determined past, jus soli look at the future, enabling a country create a pluralistic and inclusive society.

## Citizenship by Birth and Descent

While discussing citizenship in the Constituent Assembly (CA), the drafters were very conscious of how they wanted to build the India of their dreams. Sardar Vallabhbhai Patel, now an icon for the Narendra Modi regime, rejected citizenship based on racial principle. His enlightened views, and those of the other CA members, were reflected in the Citizenship Act of 1955 which provided for citizenship by birth. This changed in 1987 when, for the first time, India made jus sanguinis applicable after the then-Prime Minister Rajiv Gandhi buckled under pressure from Assamese nationalists and signed the Assam Accord. The Accord created a framework-graded citizenship, depending on a person's parentage and when he/she had migrated to India. The constitutionality of Section 6A of the Act, which reflects the provisions of the Accord, is still pending before a five-judge bench of the Supreme Court. Ideally, the court should have disposed off this petition before insisting on an Assam NRC. The Assam Accord and the Sonowal verdict laid the grounds for the Supreme Court-directed NRC. Now, when the CAA has made the inclusion of NRC-excluded migrants belonging to certain communities possible, Assam Chief Minister Sarbananda Sonowal, who was the

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petitioner in the 2005 case, has himself expressed doubts about the final list. He has also assured the Assamese people that their culture and language will be preserved. None of the 19 lakh excluded people have been issued orders that would enable them to appeal to a Foreigners' Tribunal. Interestingly, the apex court had said nothing about the process after its conclusion. There is little doubt that the Assam Accord implicitly targeted Bengalis in general and Muslims in particular. The CAA has made this discrimination more explicit by offering citizenship to persecuted minorities from certain communities who came from Afghanistan, Pakistan and Bangladesh before a specified date. It is obvious that the Act intends to exclude Muslims, including those of persecuted religious denominations from these nations. To make a related point, the CAA could possibly also enable people to convert to one of the listed faiths and seek citizenship. They could well say that they adopted Muslim names due to a well-founded fear of persecution in these countries. The CAA, in essence, not only violates the constitutional values of secularism and freedom of religion, but also negates the principle of equal protection and non-discrimination. Finally, if the purpose of the CAA is to preserve the spirit of Vasudhaiva Kutumbakam ('The world is one family'), why does the government not enact a comprehensive refugee law that would provide for a fair and objective procedure to determine 'persecution' and allow eligible refugees to seek asylum? By conflating asylum with citizenship, the CAA sadly prioritises politics over persecuted people.

# Assessing the Anti-CAA Protests (Mohammed Ayoob - University Distinguished Professor Emeritus of International Relations)

→ It has been over six weeks since the anti-Citizenship (Amendment) Act protests started in earnest in mid-December. The continuous sit-in in Shaheen Bagh in New Delhi, which has been replicated across the country, has become the model for these protests and stirred the imagination of the people.

#### The Positives

It is time now to assess the positive and negative impacts of these protests. Let us begin with the positives. First, it has been heartening to note that these protests initially attracted support across communal lines and continue to do so, especially in States such as Kerala and Tamil Nadu. The violence by the police in Jamia Millia Islamia and Aligarh Muslim University also sparked protests on various campuses across the country. In many locales, these two streams merged and augmented each other. Second, it is probably the first time in the history of independent India that so many Muslims have come out on the streets demanding to be heard not just as a minority community but also as full and proud citizens of India. Carrying the national flag, pictures of Gandhi and Ambedkar, and reading from the Preamble of the Constitution, they have made it a fight for the protection of the secular spirit of the Constitution and not just their rights as a religious minority. Third, ordinary Muslim women have finally become active political participants leading these protests in Shaheen Bagh and in other locations. During the debate on the triple talaq bill, the Modi government had loudly proclaimed that it had the interests of Muslim women at heart. These women have now challenged the government to live up to these claims by heeding their demands to rescind the CAA-National Register of Citizens process. The protesters assert that the future of their children stands threatened as they may be deprived of their citizenship rights. Now, the negatives. First, the disproportionate violence allegedly used against the protesters,

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especially in U.P., and documented by journalists has sullied the image of India as a liberal democracy that tolerated dissent and protected the rights of citizens to protest. This has led to negative reports, especially in respected foreign publications such as The New York Times and The Economist. Second, the government's response to the protester's demands has been absolute indifference. No Central Minister has deigned to engage with the protesters, not even of Shaheen Bagh just a few kilometers from the corridors of power. All we have heard is reiteration of the same mantra: that the government will not revisit the CAA; that the protesters are being "misled" by Opposition parties; and that the protests are being engineered by the Congress to defame the government. This attitude once again gives the impression that the government is impervious to criticism and subverts Prime Minister Narendra Modi's message of "Sab ka Saath, Sab ka Vikas, Sab Ka Vishwas".

#### A Fundamental Error

Third, and possibly the most significant in the long run, is that these continuing sit-ins may have increased the Hindu-Muslim divide, especially in Delhi and U.P. This is reflected in anecdotal and impressionist accounts in the media that these protests, with their predominantly Muslim participation, may be alienating large sections of the Hindus. The organisers of the protest movements made the fundamental error of linking several demonstrations to Friday prayers because they found it the most convenient way of mobilising large crowds pouring out of mosques. The demonstration in old Delhi after Friday prayers at the Jama Masjid on December 21 was the most dramatic symbol of this strategic blunder. While the anti-CAA protests have demonstrated many positive signs likely to strengthen India's democratic political culture, there is a danger of communal polarisation if the protesters form too close a bond with a religious identity.

# A Net Verdict That Falls Short of Expectations (Suhrith Parthasarathy - Advocate Practising at The Madras High Court)

If one were to merely consider its proclamation of the law, it is difficult to quibble with the ruling of the Supreme Court of India delivered on January 10, on the ongoing communications blockade in the Kashmir Valley. Shorn of its facts, the judgment, in Anuradha Bhasin v. Union of India, reads like a majestic charter of liberties. Its interpretation of the fundamental rights governing the freedom of speech, assembly, and movement is well-nigh perfect. The Court has read the limitations on these rights narrowly and has made it clear that any restrictions placed on the Internet, among other things, must meet a test of proportionality.

# The Reality and Scant Relief

The judgment certainly drives the basic canon on civil liberties forward. But judicial review, properly understood, entails more than a mere declaration of the law; it involves the application of law to facts. As a recent video report by the online magazine, Quint, shows us, after the resumption of train services between Srinagar and Banihal, on November 17 last year, people from the Kashmir Valley have had to travel no less than 110 km on what has now been dubbed the "Internet Express" to access a few minutes on the web. Performing the most basic tasks, from filing Goods and Services Tax returns and submitting licence applications and scholarship forms to checking examination results, has required many of

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them to undertake this journey. But even then, given the multitude of people thronging the cyber cafés in Banihal, most have had to shuttle back to their homes disappointed. To them, the Court, in Anuradha Bhasin, offers no meaningful relief.

#### **Opacity in Orders**

The case itself arose out of the Union government's decision to dilute Article 370 of the Constitution, through which the State of Jammu and Kashmir (J&K) had experienced elements of administrative autonomy. Parallelly, the government imposed a series of restraints on the region. It not only issued orders under Section 144 of the Code of Criminal Procedure inflicting grave restrictions on people's movement, but it also imposed an indiscriminate shutdown of the Internet by invoking provisions of the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017 [Suspension Rules]. None of these orders was, however, made public. And many of them, especially the blockade placed on the Internet in the Kashmir Valley, continue unabated, even though more than five months have lapsed since these measures were first imposed. In its opinion, written by Justice N.V. Ramana, the Supreme Court has unequivocally rejected the suggestions made by the state that it could keep the orders imposing the restrictions secret. The right to freedom of speech and expression, contained in Article 19(1)(a) of the Constitution, the Bench held, implicitly also includes a mandate to a right to information. What is more, invoking Lon L. Fuller's famous quip — that "there can be no greater legal monstrosity than a secret statute" — the Court concluded that, in a democracy, there exists both a normative and a natural expectation that orders such as these will be made public. This finding, when viewed in conjunction with the Court's decision on access to the Internet, offers, in theory, a promising path ahead. The government's argument that past judgments relating to the infringement of a newspaper's right to freedom of speech were inapplicable to constraints placed on the use of the Internet were dismissed. No doubt, in doing so, the Court drew a facile distinction between the Internet as a "tool" on the one hand, and the expression of free speech through the means of the Internet on the other. But this, as its other findings shows us, is merely a matter of semantics.

#### **Issue of Circumstances**

For, in the judges' belief, the right to freedom of speech and expression includes within its ambit the freedom to disseminate and receive information through any means possible, including through the Internet. Additionally, the Court also recognised that the Internet today is critical to the conduct of commerce. Therefore, any restriction on the web will necessarily impinge on the right under Article 19(1)(g), "to carry on any occupation, trade or business". Now, none of this means that no restrictions can ever be placed on the Internet. The real question is this: under what circumstances would a limitation made on accessing the web be constitutionally justifiable? In answering this question, the Court restated the law with special brio. It found, as in "Lord Diplock's aphorism", that "you must not use a steam hammer to crack a nut, if a nutcracker would do." Or, in other words, that any restraint made on a fundamental freedom must be necessary and proportionate to the goal that it seeks to achieve. This notion of a doctrine of proportionality can be traced back to the administrative law of Prussia at the end of the 19<sup>th</sup> century. There, when the police invoked a power, which allowed it to restrict liberty as was "necessary for the maintenance of public order", the Prussian Supreme Administrative Court held that it had to examine whether the measures

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adopted by the police surpassed in its intensity what was considered necessary for fulfilling the intended objective.

## **Need for Scrutiny**

In its present form in India, as held in Anuradha Bhasin, the doctrine demands scrutiny at various levels. First, it requires the state to show the Court that the basic aim that the restriction seeks to achieve is legitimate; second, the state must demonstrate that it has chosen the "least restrictive" measure possible to achieve its purported objective; and third the state must establish that there exists a rational nexus between the limitation imposed and its purported aim. Therefore, the basic nub of the test is to confirm that the government in pursuit of a legitimate aim has treated people's fundamental rights with the greatest care and attention possible. This crystallising of the requirements of proportionality will undoubtedly be valuable in future cases. But ultimately the dispute in Anuradha Bhasin concerned Kashmir. And, here, while recognising that an interminable blocking of the Internet will violate the law, the Court still does not hold the shutdown illegal. It is unclear, the judgment said, what orders are still in force. Moreover, there remains, it added, an "apprehension of likelihood raised in relation to the possibility of public order situations". This being the case, the Court relegated the review back to the realm of the executive, by directing a committee constituted under the Suspension Rules to periodically examine the orders blocking access to the Internet. Following this judgment, the J&K administration has issued a brief three-page order reviewing its ongoing restrictions. But, this order, which retains the existing ban on mobile data in the Kashmir Valley, while ordering the establishment of Internet kiosks to allow people to access "white-listed" government and banking websites, neither shows us why these are the least restrictive measures available nor demonstrates whether any other alternatives were so much as considered by the government. No doubt, it is possible that fresh petitions might assail these developments. But the government's new order only compounds our feeling of perplexity at the judgment. The Latin maxim, Ubi Jus Ibi Remedium — that where there is a right there is a remedy underpins Article 32 of the Constitution, which guarantees a liberty to move the Supreme Court when a fundamental right is violated. Here, the Court found that a ceaseless shutdown of the web would be unconstitutional, but it still failed to issue any directions quashing the blockade. A belief in the rule of law stems, at least partly, from a juridical culture that holds the state responsible when it trenches on its constitutional limits. In Anuradha Bhasin, howsoever genuine and sonorous those legal principles it upholds might be, the Court's ultimate conclusion is gravid with meaning: the law demands respect, but just not in this case; at least not just yet.

# Time Limit on Advance Bail Violates Personal Liberty

→ The protection of anticipatory or pre-arrest bail cannot be limited to any time frame or "fixed period" as denial of bail amounts to deprivation of the fundamental right to personal liberty in a free and democratic country, a Constitution Bench of the Supreme Court ruled. A five-judge Bench, led by Justice Arun Mishra, acknowledged that anticipatory bail helps thwart influential powers from implicating their rivals in false cases. Section 438 (anticipatory bail) of the Code of Criminal Procedure protects people from the ignominy of detention in jail for days on end and disgrace to their reputation. The court recorded its amicus curiae and senior advocate Harin Raval's argument that anticipatory bail is all the more needed now because

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there is an accentuation of political rivalry and "this tendency is showing signs of steady increase". "The life or duration of an anticipatory bail order does not normally end at the time and stage when the accused is summoned by the court, or when charges are framed, but can continue till the end of the trial," the court held. The questions referred to the Constitution Bench were twofold: whether the protection granted to a person under Section 438 should be limited to a fixed period till the accused surrenders in court, and whether the life of anticipatory bail should end when the accused is summoned by the court. The 133page judgment includes two separate and concurring opinions by Justices M.R. Shah and S. Ravindra Bhat. Justices Mishra, Indira Banerjee and Vineet Saran joined them to issue guidelines for courts while granting anticipatory bail. "The history of our Republic — and indeed, the freedom movement — has shown how the likelihood of arbitrary arrest and indefinite detention and the lack of safeguards played an important role in rallying the people to demand independence," Justice Bhat wrote on the importance of the provision. "The spectre of arbitrary and heavy-handed arrests: too often, to harass and humiliate citizens, and oftentimes, at the interest of powerful individuals (and not to further any meaningful investigation into offences) led to the enactment of Section 438," he added. An application for anticipatory bail should be based on concrete facts and not vague or general allegations. The application should also contain bare essential facts relating to the offence and why the applicant reasonably apprehends arrest. It should also have "his side of the story". "These are essential for the court to evaluate the threat or apprehension, its gravity or seriousness and the appropriateness of any condition that may have to be imposed... Special or other restrictive conditions may be imposed if the case or cases warrant, but should not be imposed in a routine manner in all cases," the Bench pointed out. The court held that a plea for anticipatory bail can be filed even before the registration of FIR as long as there is reasonable basis for apprehension of arrest and clarity of facts. Nothing in Section 438 of the CrPC compels or obliges courts to impose conditions limiting the relief in terms of time or upon filing of FIR or recording of statement of witnesses by the police during investigation or inquiry, etc. Courts, depending on the seriousness of the threat of arrest, need not wait to hear the prosecution's version before granting anticipatory bail. Issuance of notice to the prosecutor can be done simultaneously while granting protection from arrest to the accused. The grant of protection should not be "blanket" but confined to specific offence or incident for which relief from arrest is sought. It is open for the police to move court for arrest of the accused if there is any violation of bail conditions, the Bench said.

# Policing, A Delhi Election Issue

As political parties gear up for Assembly elections in New Delhi, they must accept that a central issue is that of violence in the city and the role of the police in relation to it. This may seem an odd suggestion as the problems faced by Delhi's people are many and diverse. For instance, as the capital of a country that seeks to take its rightful place in world affairs, it is a setback to have diplomats speak of the toxic air as a discouragement to being posted there. In any case, the threat to life of its citizens posed by pollution is so great that privileging the role of the police as an election issue may appear quixotic. Two recent events in the city suggest otherwise. In December the students of Jamia MiIlia Islamia publicly protested against the Citizenship (Amendment) Act (CAA). This was met with an unusual response from the police. The media reported eyewitness accounts of police entering the university's library and bludgeoning students. Not even the arson that took place in Delhi at the time could have

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justified the indiscriminate violence against members of a university going about their business.

## Complicity by Inaction

Within three weeks, there took place another act of violence against students in a university, though not by the police. Masked hoodlums entered the Jawaharlal Nehru University (JNU)'s campus and attacked students and staff in a targeted way. The pattern of the attacks suggested strongly that it was carried out by right-wing forces opposed to left-wing politics at JNU. The Delhi police, we are told, stood by outside the gates of the campus while a clubwielding mob prowled about the campus for several hours. If the University's extensive security apparatus was unable to quell the violence, it ought to have called in the police. There is an allegation that the police were complicit in the attack. Partisan conduct by the police in India is by no means confined to the Delhi police, nor are their attacks on students of recent origin. However, while in the mob attacks on Sikhs in Delhi in 1984 and against Muslims in Gujarat in 2002, the police had allegedly only been complicit in the violence, in the protests following the CAA they may have taken the law into their own hands. Thus, from the pressure exerted on students and faculty of the IIM-Ahmedabad to not protest on their campus to entering a hospital treating those injured by gunfire in Mangaluru, everything points to predetermined police action in turning on the opponents of the regime. However, it is in Uttar Pradesh (U.P.) that the role of the police is the most disturbing. The death toll from police firing is over 20. Following this, FIRs were registered against persons for damage to public property. Destruction may well have happened. However, those implicated have publicly denied that they have had anything to do with the protests. Ironically, the list of people against whom FIRs were filed includes a retired policeman and a rickshaw-puller. Gujarat, Karnataka and U.P. have Bharatiya Janata Party (BJP) governments. In Delhi, the police are not answerable to the State government but to the Union Home Ministry, also currently under the BJP. Nevertheless, the Aam Aadmi Party (AAP) government has a responsibility to investigate the violence at Jamia and JNU as it took place under its watch. The BJP and the AAP are also the main protagonists in the upcoming elections. Events that take place in Delhi resonate across the country disproportionately. So, the agenda in the State's elections may be expected to make an impression elsewhere in India. With two instances of staged violence in close succession, the role of the police in them needs scrutiny. We are a democracy, and elections are an appraisal of how we are governed.

# What It Means to Be Removed from A Party's List of Star Campaigners

→ The Election Commission (EC) removed BJP leaders Anurag Thakur and Parvesh Sahib Singh Verma from the party's list of star campaigners. The move comes after Thakur encouraged the crowd at a rally this week to chant "desh ke gaddaron ko goli maaro (gun down traitors)" and Singh, in an interview, claimed that Shaheen Bagh protestors could "enter homes and rape sisters and daughters". The Commission has already issued show-cause notices to both leaders for their provocative remarks. But how does removal from BJP star campaigners' list affect Thakur and Singh? Does it mean they can't campaign anymore?

# Who Is A Star Campaigner?

A recognised political party can have 40-star campaigners and an unrecognised (but registered) political party can have 20. The list of star campaigners has to be communicated

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to the Chief Electoral Officer and Election Commission within a week from the date of notification of an election. The expenditure incurred on campaigning by such campaigners is exempt from being added to the election expenditure of a candidate. However, this only applies when a star campaigner limits herself to a general campaign for the political party she represents.

#### What If A Star Campaigner Campaigns Specifically for One Candidate?

If a candidate or her election agent shares the stage with a star campaigner at a rally, then the entire expenditure on that rally, other than the travel expenses of the star campaigner, is added to the candidate's expenses. Even if the candidate is not present at the star campaigner's rally, but there are posters with her photographs or her name on display, the entire expenditure will be added to the candidate's account. This applies even if the star campaigner mentions the candidate's name during the event. When more than one candidate shares the stage, or there are posters with their photographs, then the expenses of such rally/meeting are equally divided between all such candidates.

Does Removal from The Star Campaigner's List Bar Thakur And Singh From Campaigning? No, that decision will only be taken by the EC once the two leaders reply to the show cause notices served to them. However, the removal from the star campaigner's list does make campaigning difficult for them. This is because whichever constituency they now hold their election meeting or rally at, irrespective of whether they limit themselves to general party propaganda or not, the entire expenditure of the event will be added to the account of the BJP candidate contesting from that seat. Since candidates cannot afford to breach their expenditure limit (₹28 lakh in case of Delhi elections), they would not want Thakur and Singh to campaign in their constituency.

# **Crime and Politics**

The Supreme Court has taken a timely decision by agreeing to hear a plea from the Election Commission of India (ECI) to direct political parties to not field candidates with criminal antecedents. The immediate provocation is the finding that 46% of Members of Parliament have criminal records. While the number might be inflated as many politicians tend to be charged with relatively minor offences — "unlawful assembly" and "defamation" — the real worry is that the current cohort of Lok Sabha MPs has the highest (29%) proportion of those with serious declared criminal cases compared to its recent predecessors. Researchers have found that such candidates with serious records seem to do well despite their public image, largely due to their ability to finance their own elections and bring substantive resources to their respective parties. Some voters tend to view such candidates through a narrow prism: of being able to represent their interests by hook or by crook. Others do not seek to punish these candidates in instances where they are in contest with other candidates with similar records. Either way, these unhealthy tendencies in the democratic system reflect a poor image of the nature of India's state institutions and the quality of its elected representatives. The Supreme Court has come up with a series of landmark judgments on addressing this issue. It removed the statutory protection of convicted legislators from immediate disqualification in 2013, and in 2014, directed the completion of trials involving elected representatives within a year. In 2017, it asked the Centre to frame a scheme to appoint special courts to exclusively try cases against politicians, and for political parties to publicise

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pending criminal cases faced by their candidates in 2018. But these have not been a deterrent to legislators with dubious credentials. Perhaps what would do the trick is a rule that disallows candidates against whom charges have been framed in court for serious offences, but this is something for Parliament to consider as an amendment to the Representation of the People Act, 1951. This denouement, however, is still a pie in the sky given the composition of the Lower House with a number of representatives facing serious cases. Ultimately, this is a consequence of a structural problem in Indian democracy and the nature of the Indian state. While formally, the institutions of the state are present and subject to the electoral will of the people, substantively, they are still relatively weak and lackadaisical in governance and delivery of public goods, which has allowed cynical voters to elect candidates despite their dubious credentials and for their ability to work on a patronage system. While judicial pronouncements on making it difficult for criminal candidates to contest are necessary, only enhanced awareness and increased democratic participation could create the right conditions for the decriminalisation of politics.

## Why the President's Address Matters

→ Kerala Governor Arif Mohammad Khan addressed the Legislative Assembly of the State. During his address, he stopped before reading out paragraph 18, which related to the Kerala government's opposition to the Citizenship Amendment Bill. The Governor said he was of the opinion that the paragraph did not relate to policy or programme. He went on to say that since the paragraph relates to the view of the government, to honour the wish of the Chief Minister he was going to read it despite his disagreement with the CM.

## Under What Provisions Does the President or A Governor Address the Legislature?

The Constitution gives the President and the Governor the power to address a sitting of the legislature. The special power is with regard to two occasions. The first is to address the opening session of a new legislature after a general election. The second is to address the first sitting of the legislature each year. Commonly referred to as the President's or Governor's Address, they are a constitutional requirement. A session of a new or a continuing legislature cannot begin without fulfilling this requirement. When the Constitution came into force, the President was required to address each session of Parliament. So, during the provisional Parliament in 1950, the President gave an address for all three sessions. At the suggestion of Speaker G V Mavalankar, the first Constitutional Amendment in 1951 changed this position. Besides being a constitutional requirement, the President's or Governor's Address is keenly watched as it outlines the government's policy agenda and stand on issues.

## Are There Parallels in Other Countries?

Similar provisions exist in other democracies. In the United States, it is referred to as the "State of the Union". The phrase comes from an article in the US Constitution which specifies that the President, "from time to time give to Congress information of the State of the Union and recommend to their Consideration such measures as he shall judge necessary and expedient." In the United Kingdom, it is referred to as the Queen's Speech and is part of the ceremony to mark the formal start of the parliamentary year. But the two systems are different. In the American system, the President has the option of simply sending his written speech to Congress instead of personally going to deliver it. He also puts forward the position of his administration. In the British system, the Queen's speech written by the government.

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She reads it in person from the throne in the House of Lords. The President's Address in India is mirrored on the British system. During the framing of the Constitution, B R Ambedkar drew a similarity between the President and the monarch under the English system. He said the President "is the Head of State but not of the executive. He represents the nation but does not rule the nation. He is the symbol of the nation. His place in the administration is that of a ceremonial device of a seal by which the nation's decisions are made known". The Constitution binds the President and the Governor to act on the aid and advice of the Council of Ministers of the Union and state governments respectively, on a majority of issues. Therefore, the speech that the President or the Governor reads before the legislature is the viewpoint of the government and is prepared by it.

#### What Is the Content of The President's or Governor's Address?

During the making of the Constitution, an unsuccessful attempt was made to bring some specificity to the content of the President's Address. The President's speech follows the convention of the British system, where it contains legislative and policy proposals that the government intends to initiate. The speech also recaps the government's accomplishment in the previous years. The contents of the speech are put together by aggregating inputs from various ministries of the government.

#### If the President Disagrees with The Text of The Speech, Are They Still Bound to Read It?

The President or a Governor cannot refuse to perform the constitutional duty of delivering an address to the legislature. But there can be situations when they deviate from the text of the speech prepared by the government. So far, there have been no instances of President doing so. But there has been an occasion when a Governor skipped a portion of the address to the Assembly. In 1969, the Governor of West Bengal, Dharma Vira, skipped two paragraphs of the address prepared by the United Front government. The government was led by Chief Minister Ajoy Kumar Mukherjee with Jyoti Basu was the Deputy CM. The skipped portion described as unconstitutional the dismissal of the first United Front government by the Congress-ruled central government. The issue was then debated in Parliament. The Opposition was critical of the Governor's conduct and moved a motion disapproving of his actions and calling them against the letter and spirit of the Constitution. MPs from the Treasury benches, including Asoke Kumar Sen, Law Minister Govinda Menon and Home Minister Y B Chavan, came to the defence of the Governor. The Opposition's motion was ultimately defeated.

#### How Have Members Responded to The Addresses Over the Years?

The conduct of MLAs during the address has sometimes been an issue. The Governor's speech in state legislatures has routinely been interrupted. For example, in 2017, during the Governor's address in the Uttar Pradesh Assembly, paper balls and planes were thrown at Governor Ram Naik. The staff of the Assembly had to surround the Speaker and swat away the paper balls using cardboard files. In Parliament, the first instance of interruption of a President's speech happened in 1963; President Sarvepalli Radhakrishnan was speaking when some MPs interrupted him. The Lok Sabha took note of the incident and a reprimand was issued to the MPs. Over the years, political parties have resolved to treat the President's Address sacrosanct and agreed not to interrupt it.



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#### What Procedures Follow the Address?

After the President or Governor delivers the address, a debate takes place not only on the contents of the address but also the broad issues of governance in the country. This then paves the way for discussion on the Budget.

## **Pregnancy Termination Bill Gets Cabinet Nod**

The borders of viability of a particular process are often only as restrictive as the technology on which it rides. In some cases, as science advances, the elastic borders of viability will weave out to accommodate much more than they did in the past. The Centre's move to extend the limit of medical termination of pregnancy to 24 weeks is a sagacious recognition of this, and needs to be feted. The extension is significant, the government reasoned, because in the first five months of pregnancy, some women realise the need for an abortion very late. Usually, the foetal anomaly scan is done during the 20<sup>th</sup>-21<sup>st</sup> week of pregnancy. If there is a delay in doing this scan, and it reveals a lethal anomaly in the foetus, 20 weeks is limiting. Obstetricians argue that this has also spurred a cottage industry of places providing unsafe abortion services, even leading, in the worst of cases, to the death of the mother. When women take the legal route to get formal permission for termination after 20 weeks, the tedium is often frustrating and stressful for a mother already distressed by the bad news regarding her baby. The extension of limit would ease the process for these women, allowing the mainstream system itself to take care of them, delivering quality medical attention. Also, the upper gestation limit will not apply to cases of substantial foetal abnormalities diagnosed by the Medical Board." Name and other particulars of a woman whose pregnancy has been terminated shall not be revealed except to a person authorised in any law for the time being in force," the release said.

# Why Is A Certificate to Identify a Transpersons?

The Supreme Court asked the government to explain why a law meant to protect the transgender community requires a magistrate's certificate as a prior condition for the State to even identify a transpersons. A Bench led by Chief Justice of India Sharad A. Bobde issued formal notice to the government on the petition filed by Swati Bidhan Baruah, an Assambased advocate and transgender rights activist, who argued that the "right to selfidentification forms part of right to life under Article 21 of the Constitution". The petitioner, a transpersons and a part of the one of the first litigations for transgender rights in the Bombay High Court, contended that the Transgender (Protection of Rights) Act of 2019 "instead of furthering or protecting the fundamental rights of transpersons, violates and facilitates the violation of their rights to life, privacy and equality". The petition, represented by advocate Rashmi Nandakumar, argued that "the Act provides for a method of stateidentification of transpersons by a process of certification by the District Magistrate. The petitioner submits that this method is a disproportionate invasion into the right to privacy of transpersons and is manifestly arbitrary," The Act, the plea said, actually sets the clock back and negated even the protections secured to transpersons by the Supreme Court through its 2014 judgment in the NALSA case, which had recognised the discrimination suffered by transpersons and directed the government to protect their fundamental rights. The petition said the provisions in the Act, intended to grant the right against non-discrimination, were completely toothless. It pointed out that the Act provided "as little as six months' imprisonment" for person found guilty of endangering the life of or for sexual abuse of a

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transperson. "The provision violates the right to life of transpersons by prescribing grossly inadequate punishment for heinous acts," it said. The apex court had directed the government to include the transgender community to be treated as Socially and Educationally Backward Classes of citizens for the purposes of reservation in education and public sector employment. *The Act, however, contained no such measure*, it said.

## How India's No-Fly List Works

→ Four airlines in India — IndiGo, SpiceJet, Air India and GoAir — have banned stand-up comedian Kunal Kamra from taking their flights after he allegedly heckled television news anchor Arnab Goswami on an IndiGo flight.

#### What Are the Rules for Putting A Flier on The No-Fly List?

In 2017, the government issued rules for preventing disruptive behaviour by air travellers and laid down guidelines for a no-fly list. As per the rules, a complaint of unruly behaviour needs to be filed by the pilot-in-command, and this is to be probed by an internal committee to be set up by the airline. During the period of pendency of the inquiry, the rules empower the concerned airline to impose a ban on the passenger. The committee is to decide the matter within 30 days, and also specify the ban duration. The rules define three categories of unruly behaviour: Level 1 refers to behaviour that is verbally unruly, and calls for debarment up to three months; Level 2 indicates physical unruliness and can lead to the passenger being debarred from flying for up to six months; Level 3 indicates life-threatening behaviour for which the debarment would be for a minimum of two years.

## Why Is There A No-Fly List?

The Civil Aviation Requirements issued by the Directorate General of Civil Aviation (DGCA) note that unruly behaviour on board aircraft has been declared an offence and is a punishable act. Even one unruly passenger can jeopardise safety on board. The government kick-started the process of developing these rules after an incident involving then Shiv Sena MP Ravindra Gaikwad assaulting an Air India staffer on a flight back in 2017. Subsequently, a clutch of airlines banned Gaikwad from travelling on their flights; this was in effect for two weeks. The government came out with the no-fly list in September that year.

# How Does Someone End Up on The List?

A no-fly list essentially begins with a passenger causing verbal, physical or life-threatening unruliness. The DGCA has given an indicative list of actions that may be construed as unruly. These include: consuming alcohol or drugs resulting in unruly behaviour; smoking in an aircraft; using threatening or abusive language towards a member of the crew or other passengers; intentionally interfering with the performance of the duties of a crew member etc. Once the pilot-in-command submits his complaint, the airline is bound to refer the complaint to its internal committee. During the course of the enquiry, the airline can ban the passenger from flying for a maximum period of up to 30 days. In addition, the Ministry of Home Affairs provides a list of individuals identified as national security threats to DGCA and to the airlines, for inclusion in the no-fly list.

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## What Is the Structure of The Internal Committee?

The internal committee is to consist of a retired district and sessions judge as Chairman, along with a representative from a different scheduled airline and a representative from a passenger's association or consumer association as members. The internal committee shall give the final decision in 30 days by giving the reasons in writing, the rules state, and the decision of the committee shall be binding on the airline concerned. In case the committee fails to take a decision in 30 days, the passenger will be free to fly.

#### Is There Redress for Someone Declared Guilty by The Internal Committee?

Any aggrieved person, upon receipt of communication of a ban from the airline, may appeal within 60 days from the date of issue of the order, to an Appellate Committee constituted by the Ministry of Civil Aviation, consisting of a retired judge of a High Court as Chairman; a representative from a passengers' association or a consumer association; and an airlines representative not below the rank of vice-president or equivalent. The rules, however, do not specify the functional details of either the internal committee or the appellate committee, and whether they would invite the accused to make their case. The Civil Aviation Requirements state that the decision of the appellate committee shall be final and that any further appeal shall lie in a High Court.

## Will Kamra Be Able to Fly Again on Domestic Flights?

So far, four airlines have suspended his flying rights, while Vistara and AirAsia India have said they will review the situation and follow due process. Although IndiGo has announced a sixmonth ban, a final decision on the severity and duration of the ban rests on the airline's internal committee following its inquiry. If a person has been put on the no-fly list of domestic airlines, there is still a possibility that she can take international flights since the DGCA requirement applies only for Indian airlines. Things get complex in case of a codeshare, with one leg of the trip operated by an Indian airline and the other one by an overseas airline.

# How Do Other Countries Manage No-Fly Lists?

India is one of the few countries where airlines have been empowered to straight away ban a person from taking their flights. In aviation markets like the US or Canada, the no-fly list is more oriented to be a terror-watch program. In the US, the no-fly list had less than 20 people prior to 9/11, but sky-rocketed to thousands following the attacks. Cases of disruption with unruly behaviour, however, has got people on the no-fly list in the US. In 2016, US-based Delta Airlines banned a passenger for life after he was caught on video shouting profane political comments on its flight.

→ Civil Aviation Minister Hardeep Singh Puri's advice to airlines to ban stand-up comic Kunal Kamra from air travel is prima facie in violation of the rules made by his own Ministry on handling of unruly passengers. The three-month ban imposed by IndiGo, after Mr. Kamra allegedly heckled journalist Arnab Goswami on its flight, came within six hours of the incident. But rules of the Directorate General of Civil Aviation stipulate that the airline must have a three-member internal committee headed by a former judge to investigate such an incident within 30 days. An airline can ban a passenger in the interim, but that ban can't be for more than 30 days. Many have questioned the arbitrariness in the way SpiceJet, Air India and GoAir followed suit and imposed a ban "until further notice". The rules state very clearly that a person can be placed on a "no-fly list" by an airline after it concludes an internal

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inquiry. It is only after that can other airlines exercise their "option" to ban the passenger. But in this particular case, airlines did not wait for IndiGo to conclude its inquiry. IndiGo has not responded to queries from The Hindu on who the complainant was, the inquiry process and the grounds for the ban. The rules provide for a three-tier ban — three months' ban for verbal assault or gestures, a six-month ban for physical assault or sexual harassment and a ban of at least two years for life-threatening behaviour. The six-month ban, therefore, contravenes the rules as the video shows that there was no manhandling. It is important here to stress that airlines are extremely cautious in imposing flying restrictions on passengers. This is the reason the only person to be placed on a no-fly list maintained by the DGCA so far is Birju Kumar Salla, a Mumbai-based businessman who scribbled a hoax bomb threat aboard a Jet Airways aircraft which forced the airline to divert the plane to an airport en route at Ahmedabad. Though the Civil Aviation Ministry recommended that the individual be placed on a no-fly order, the airline took several days to comply with it. Though Mr. Kamra can approach an appellate committee headed by a former High Court judge against his ban within 60 days, the question is that if it is the Ministry that constitutes such a body, can there be an independent inquiry.

#### Why Some States Have Vidhan Parishads

→ The Andhra Pradesh Assembly passed a resolution to abolish the state's Legislative Council, where the opposition Telugu Desam Party (TDP) has a majority. The resolution was passed under Article 169(1) of the Constitution, which allows Parliament to either create or abolish a Council in a state "if the Legislative Assembly of the State passes a resolution to that effect by a majority of the total membership of the Assembly and by a majority of not less than two-thirds of the members of the Assembly present and voting". The TDP, which has 23 members in the Assembly, boycotted the session to indicate that the resolution to abolish the Council was passed in the absence of the Opposition.

## Casualty in Political War

While the YSR Congress has an overwhelming majority of 151 in the 175-member Assembly, it has only 9 MLCs in the 58-strong Upper House. The government decided to abolish the Council after the TDP's MLCs last week blocked The Andhra Pradesh Decentralisation and Inclusive Development of All Regions Bill, 2020 and The Andhra Pradesh Capital Region Development Authority Repeal Bill, 2020 — the first steps towards the establishment of three capitals for the state at Amaravatri, Visakhapatnam, and Kurnool. Chairman of the Council Mohammed Ahmed Shariff, who belongs to the TDP, had used his discretionary powers to refer the two Bills to a Select Committee for review, tying the government's hands for at least the next three months. The position taken by the TDP in the Council had also led to two other important Bills — to establish separate commissions for Scheduled Castes and Scheduled Tribes, and to make the medium of instruction English in government schools — being stalled. The YSRCP had last month threatened to do away with the Council after it became clear the TDP would block the latter two Bills. After the Bills to create the three capitals were blocked, Chief Minister YS Jaganmohan Reddy had said, "We need to seriously think whether we need to have such a House which appears to be functioning with only political motives." After a Cabinet meeting on Monday morning that cleared the resolution to dissolve the Council, Finance and Legislative Affairs Minister B Rajendranath said: "People have given us a big mandate and power to take decisions in the interest of the state. But TDP is using its





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political clout in the Legislative Council to stall important Bills. They illegally blocked the three-capitals Bill. The TDP is not letting us carry on our work, so we have proposed to abolish the Council. We will send the resolution to the Centre for approval."

## The Council's Journey

The Vidhan Parishad of united Andhra Pradesh was created on July 1, 1958, and dissolved on May 31, 1985. It was resurrected after 22 years, on March 30, 2007. *Ironically, it was abolished the last time by N T Rama Rao, the founder of the TDP, after the Congress blocked all the government's decisions in the Council. And it was restored by Dr Y S Rajashekara Reddy, the father of Chief Minister Jaganmohan Reddy.* Since the bifurcation of Andhra Pradesh in 2014, the Council has had 58 members. The TDP's strength fell to 28 last week after the resignation of D Manikya Varaprasad. Two Ministers in the Jaganmohan Reddy government, Deputy Chief Minister Pilli Subhash Chandra Bose, and Marketing Minister Mopidevi Venkata Ramana are members of the Council. They will have to resign when the Council is ultimately abolished. That, however, will happen only after Parliament approves the resolution passed by the Assembly. The Union Law Ministry will prepare a Bill to be tabled in Parliament. The process may take 3-6 months, during which time the Council will continue to function.

#### Councils in The Constitution

Under Article 168, states can have either one or two Houses of legislature. Article 169 leaves the choice of having a Vidhan Parishad to individual states. The Constituent Assembly was divided on having a second chamber in the states. It was argued that a second House can help check hasty actions by the directly elected House, and also enable non-elected persons to contribute to the legislative process. However, it was also felt that some of the poorer states could ill afford the extravagance of two Houses. It has been pointed out that the Councils can be used to delay important legislation, and to park leaders who have not been able to win an election. Under Article 171, a Council cannot have more than a third of the number of MLAs in the state, and not less than 40 members. A third of the MLCs are elected by MLAs, another third by a special electorate comprising sitting members of local government bodies such as municipalities and district boards, 1/12<sup>th</sup> by an electorate of teachers, and another 1/12<sup>th</sup> by registered graduates. The remaining members are appointed by the Governor for distinguished services in various fields.

#### Councils in Other States

Besides Andhra Pradesh, five other states have Vidhan Parishads — Bihar (58 members), Karnataka (75), Maharashtra (78), Telangana (40), UP (100). Jammu and Kashmir had a Council until the state was bifurcated into the Union Territories of J&K and Ladakh. In 1986, the M G Ramachandran government in Tamil Nadu abolished the Council. The DMK government passed a law revive it, but the subsequent J Jayalalithaa-led government withdrew it after coming to power in 2010. The Odisha Assembly has passed a resolution for a Legislative Council. Proposals to create Councils in Rajasthan and Assam are pending in Rajya Sabha. The parliamentary panel that examined the Rajasthan Bill advocated a national policy for creation and abolition of Councils: "The status of Second Chamber cannot be of temporary in nature depending on the mood of the Government of the day nor can be abolished once created, only at the whims and fancy of a newly elected Government in the State."

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# Takeaways from Bodo Accord

→ The Centre, the Assam government and Bodo groups — including all factions of the militant National Democratic Front of Bodoland (NDFB) — signed an agreement for peace and development. Home Minister Amit Shah described it as the "final and comprehensive solution" of the long-standing Bodo issue.

#### What Is the Bodo Issue?

Bodos are the single largest community among the notified Scheduled Tribes in Assam. Part of the larger umbrella of Bodo-Kachari, the Bodos constitute about 5-6% of Assam's population. The first organised demand for a Bodo state came in 1967-68 under the banner of the political party Plains Tribals Council of Assam. In 1985, when the Assam Movement culminated in the Assam Accord, many Bodos saw it as essentially focusing on the interests of the Assamese-speaking community. In 1987, the All Bodo Students Union (ABSU) led by Upendra Nath Brahma revived the Bodo statehood demand. The armed group Bodo Security Force arose, under the leadership of Ranjan Daimary, in October 1986. It subsequently renamed itself NDFB, and later split into factions. "All NDFB factions under SoO [Suspension of Operations] shall abjure path of violence, surrender their weapons and disband their armed organisations within one month of signing this MoS," the Memorandum of Settlement (MoS) said.

# Amid Protests Against the Citizenship Amendment Act, What Is the Political Takeaway from The Accord?

At a time when the ruling BJP is under fire from the large Assamese-speaking community, the Accord underlines its effort to cement its hold among Bodo voters. The Assamese-speaking community had voted overwhelmingly for the BJP in 2016. Now Assamese student leaders, activists, popular singers and actors, and eminent citizens have addressed large, anti-BJP protest gatherings across the state. These have been prominent in Upper Assam in the east, where the Assamese-speaking community is dominant. The Bodoland region is in western Assam, and large sections of the Bodos are already seen as supportive of the BJP.

#### What Is The BTC?

It is an autonomous body under the Sixth Schedule of the Constitution. There have been two Bodo Accords earlier, and the second one led to the formation of BTC. The ABSU-led movement from 1987 culminated in a 1993 Bodo Accord, which paved the way for a Bodoland Autonomous Council (BAC), but ABSU withdrew its agreement and renewed its demand for a separate state. In 2003, the second Bodo Accord was signed by the extremist group Bodo Liberation Tiger Force (BLTF), the Centre and the state. This led to the BTC.

#### What Has Been Settled Now?

Primarily, a truce with four factions of the NDFB after decades of armed movement that, according to Shah, claimed over 4,000 lives. "The most significant point is this Accord marks the end of the armed movement. The coming of all factions of the armed groups together to

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sign the Accord is a very big thing," ABSU president Promod Boro said. Asked about the statehood demand, Boro said the ABSU will decide in its next special convention. Assam minister Himanta Biswa Sarma said the demand for statehood came to end with the Accord. An ABSU leader, however, said: "It is not mentioned anywhere in the settlement that the ABSU will give up the statehood demand." The agreement says: "Negotiations were held with Bodo organisations for a comprehensive and final solution to their demands while keeping intact the territorial integrity of the State of Assam."

## What Was Agreed on Territory?

The area under the jurisdiction of BTC, formed under the 2003 Accord, was called the Bodo Territorial Autonomous District (BTAD). The BTAD was renamed Bodoland Territorial Region (BTR). BTAD comprises Kokrajhar, Chirang, Baksa and Udalguri districts, accounting for 11% of Assam's area and 10% of its population. Estimates for the Bodo population in BTAD vary. A 2015 report in The Assam Tribune quoted the then state government as telling the Assembly that "it does not have any information of the break-up of population of Bodo and non-Bodo communities in BTAD". Also, in 2015, an article in Economic and Political Weekly said only 27% of the BTAD population is Bodo. The four districts in BTAD constitute Kokrjhar Lok Sabha constituency, whose MP Naba Kumar Saraniya is a non-Bodo. The new Accord provides for "alteration of area of BTAD" and "provisions for Bodos outside BTAD". A commission appointed by the state government will examine and recommend if villages contiguous to BTAD and with a majority tribal population can be included into the BTR while those now in BTAD and with a majority non-tribal population can opt out of the BTR. This, minister Sarma explained, will lead to an increase in the Bodo population in BTR and decrease in non-tribal population, leading to mitigation of inter-community clashes wherever it was happening. The government will set up a Bodo-Kachari Welfare Council for focused development of Bodo villages outside BTAD — which opens up a way to potentially address the needs of Bodos outside BTAD. Several of the provisions agreed upon were an extension of what was already in effect. For instance, it provides for more legislative, executive, administrative and financial powers to BTC; and amendments to the Sixth Schedule of the Constitution to "improve the financial resources and administrative powers of BTC". The 2020 agreement says the Government of Assam "will notify Bodo language in Devanagri script as the associate official language in the state".

## What Happens to The Cases That Were Filed During the Armed Movement?

Among the signatories was Ranjan Daimary whose faction is called NDFB(RD). Other factions include NDFB(Progressive) and NDFB(S). Ranjan Daimary and nine others were sentenced to life last year for the killing of around 90 people in serial blasts in Assam in October 2008. The settlement says criminal cases for "non-heinous" crimes shall be withdrawn and those in connection with heinous crimes "shall be reviewed case by case according to the existing policy on the subject". In 2014, in Khagrabari in Baksa district, Bodo extremists and others had allegedly gunned down nearly 40 Bengali Muslims. Advocate Aman Wadud, who is representing the victims at the special NIA court in Guwahati, said, "No 'understanding' can absolve those accused of heinous mass murders. The MoS says cases of heinous crimes will be 'reviewed'. Justice should not be throttled in the name of 'peace'." On January 30, 1,500 cadres of NDFB factions will lay down arms before the state government. The MoS states New Delhi and Dispur will take all necessary steps to rehabilitate the cadres, such as ex-

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gratia, funding economic activities, vocational trading and recruitment in appropriate government jobs.

## Understanding the Bru Settlement

Twenty-three years after ethnic clashes in Mizoram forced 37,000 people of the Bru (or Reang) community to flee their homes to neighbouring Tripura, an agreement has been signed to allow them to remain permanently in the latter state. The agreement among the Bru leaders and the governments of India, Tripura, and Mizoram, signed in New Delhi on January 16, gives the Bru the choice of living in either state. In several ways, the agreement has redefined the way in which internal displacement is treated in India.

## What Is in The Bru Agreement?

All Bru currently living in temporary relief camps in Tripura will be settled in the state, if they want to stay on. The Bru who returned to Mizoram in the eight phases of repatriation since 2009, cannot, however, come back to Tripura. To ascertain the numbers of those who will be settled, a fresh survey and physical verification of Bru families living in relief camps will be carried out. The Centre will implement a special development project for the resettled Bru; this will be in addition to the ₹600 crore fund announced for the process, including benefits for the migrants. Each resettled family will get 0.03 acre (1.5 ganda) of land for building a home, ₹1.5 lakh as housing assistance, and ₹4 lakh as a one-time cash benefit for sustenance. They will also receive a monthly allowance of ₹5,000, and free rations for two years from the date of resettlement. All cash assistance will be through Direct Benefit Transfer (DBT), and the state government will expedite the opening of bank accounts and the issuance of Aadhaar, permanent residence certificates, ST certificates, and voter identity cards to the beneficiaries.

#### When Will the Bru Resettlement Take Place?

Physical verification to identify beneficiaries will be carried out within 15 days of the signing of the deal. The land for resettlement will be identified within 60 days, and the land for allotment will be identified within 150 days. The beneficiaries will get housing assistance, but the state government will build their homes and hand over possession. They will be moved to resettlement locations in four clusters, paving the way for the closure of the temporary camps within 180 days of the signing of the agreement. All dwelling houses will be constructed and payments completed within 270 days. Tripura Chief Minister Biplab Kumar Deb has said he hopes to wrap up the process even sooner — in six months.

#### Where Will the Bru Be Resettled?

Revenue experts reckon 162 acres will be required. Chief Minister Deb has said that the effort will be to choose khash or government land, but since Tripura is a small state (only 10,491 sq. km), his government would explore the possibility of diverting forest lands, even reserve forest areas if necessary, to grant the new entitlements. Diverting forest land for human settlements will, however, need clearance from the Union Ministry of Environment and Forests (MoEF), which is likely to take at least three months. Deb has said that the central government has promised to provide funds, if needed, to acquire forest land or government land.

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## In What Condition Are the Migrants Now?

The Bru or Reang are a community indigenous to Northeast India, living mostly in Tripura, Mizoram, and Assam. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group (PVTG). Over two decades ago, they were targeted by the Young Mizo Association (YMA), Mizo Zirwlai Pawl (MZP), and a few ethnic social organisations of Mizoram who demanded that the Bru be excluded from electoral rolls in the state. In October 1997, following ethnic clashes, nearly 37,000 Bru fled Mizoram's Mamit, Kolasib, and Lunglei districts to Tripura, where they were sheltered in relief camps. Since then, over 5,000 have returned to Mizoram in nine phases of repatriation, while 32,000 people from 5,400 families still live in six relief camps in North Tripura. Under a relief package announced by the Centre, a daily ration of 600 g rice was provided to every adult Bru migrant and 300 g to every minor. Some salt too, was given to each family. Every adult received a daily cash dole of ₹5; every minor ₹2.50. Meagre allocations were made from time to time for essentials such as soap, slippers, and mosquito nets. Most migrants sold a part of their rice and used the money to buy supplies, including medicines. They depended on the wild for vegetables, and some of them have been practising slash-and-burn (jhum) cultivation in the forests. They live in makeshift bamboo thatched huts, without permanent power supply and safe drinking water, with no access to proper healthcare services or schools.

#### How Did the Agreement Come About?

In June 2018, Bru leaders signed an agreement in Delhi with the Centre and the two state governments, providing for repatriation to Mizoram. Most residents of the camps, however, rejected the "insufficient" terms of the agreement. Only 328 families returned to Mizoram, rendering the process redundant. The camp residents said the package did not guarantee their safety in Mizoram, and that they feared a repeat of the violence that had forced them to flee. On November 16, 2019, Pradyot Kishore Debbarma, scion of Tripura's erstwhile royal family, wrote to Home Minister Amit Shah seeking the resettlement of the Bru in the state. The Bru were originally from Tripura, and had migrated to Mizoram after their homes were flooded due to the commissioning of the Dumboor hydroelectric power project in South Tripura in 1976, he claimed. The very next day, Chief Minister Deb too, asked the Centre for permanent settlement of the Bru in Tripura.

#### How Is This Agreement Different from The Earlier Initiatives Taken for The Bru?

Successive state and central governments had thus far stressed only on peacefully repatriating the Bru, even though the enduring fear of ethnic violence remained a fundamental roadblock. The two other "durable solutions" for refugees and displaced persons suggested by the UN Refugee Agency — local integration or assimilation, and resettlement — were never explored. Apart from their own Kaubru tongue, the Bru speak both Kokborok and Bangla, the two most widely spoken languages of the tribal and non-tribal communities of Tripura, and have an easy connection with the state. Their long stay in Tripura, albeit in exile and in terrible conditions, has also acquainted them very well with the state's socio-political ecology. Home Minister Shah, who presided over the signing of the agreement, hailed the "historic" resolution of the Bru issue. He thanked the Chief Ministers of Tripura and Mizoram, Pradyot Kishore Debbarma, and some social organisations for creating the conditions for the agreement.

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- → Guwahati-based researcher on social issues and conflicts, Walter Fernandes, said the decision was humanitarian from the point of view of the Brus, who were apprehensive about returning to Mizoram, but felt it could lead to conflicts with the locals of Tripura. Delhi-based rights activist Suhas Chakma said it could set a bad precedent, encouraging ethnocentric states to eject minorities of all hues besides making the Brus of Mizoram opt for the rehabilitation package in the relative safety of Tripura. The displaced Brus who returned to Mizoram have already begun demanding a package equivalent to the one those who stayed behind in the Tripura relief camps would be getting. And conflicts between the Brus and the local Bengali non-tribal people have started taking place in Tripura.
- → The Brus, aka Reangs, are spread across Tripura, Mizoram and southern Assam.
- → While many Brus of Assam and Tripura are Hindu, the Brus of Mizoram converted to Christianity over the years.
- → Clashes in 1995 with the majority Mizos led to the demand for the removal of the Brus, perceived to be non-indigenous, from Mizoram's electoral rolls. This led to an armed movement by a Bru outfit, which killed a Mizo forest official in October 1997. The retaliatory ethnic violence saw more than 40,000 Brus fleeing to adjoining Tripura where they took shelter in six relief camps.

#### Karnataka Anti-Superstition Law

→ A controversial anti-superstition law in Karnataka, which was passed during the tenure of a Congress government in a diluted form as the Karnataka Prevention and Eradication of Inhuman Evil Practices and Black Magic Act, 2017, and received the assent of the Governor on December 6, 2017, was formally notified by the current BJP government on January 4, 2020, said a senior official of the state Social Welfare Department. The law has been piloted by the Social Welfare Department, which is headed by Deputy Chief Minister Govind Karjol, a member of the Dalit community that bears the brunt of several irrational practices.

#### The Earlier Drafts

The law, which was initially drafted as the Karnataka Anti Superstition Bill, 2013, was a pet project of former Congress Chief Minister Siddaramaiah. An expert panel from the Centre for the Study of Social Exclusion and Inclusive Policy of the National Law School of India University (NLSIU) first presented a draft Bill, outlawing over a dozen superstitious practices in 2013. The model Bill held human dignity as its central tenet and sought eradication of irrational practices found in different communities. The first draft made practices like inflicting self-wounds and conversion through bribery illegal. However, soon after the draft came into the public domain, it attracted resistance – from the then opposition BJP, the Janata Dal (Secular) and religious leaders. The BIP called it anti-Hindu, and a Lingayat seer called it an attack on the Lingayat community, the single largest in the state. Even senior Congress leaders questioned the need for the new law. Some of the proposals opposed by religious leaders and political parties in the early draft were the ban on practices such as the carrying of priests in palanquins, worshipping the feet of religious leaders, and Made Snana practised in the Dakshina Kannada region where Dalits roll over the remains of food consumed by upper castes. There was also political opposition for a proposed ban on the practice of Vaastu, astrology and palmistry. Drafts of the Bill put out by the Congress government in 2014 and 2016 also faced opposition. The inclusion of practices considered to have Vedic

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origins, such as Vaastu and astrology, among practices to be banned was opposed by various groups including leaders of the BJP.

#### The Current Version

A Bill with sizable consensus across the political spectrum finally evolved in 2017. The practice of Vaastu, astrology, pradakshina or circumambulation of holy places, yatras, parikramas performed at religious places were kept out of the purview of the law. Made Snana was banned under the law with respect to having Dalits roll over left over food. The practice has now been modified to be voluntary and not involving leftover food. Practices such as barring menstruating women from entering houses of worship and their homes, coercing people to take part in fire-walks, and beating up people by declaring them evil, are among the irrational practices that have been banned under the 2017 law. A total of 16 practices have been banned under the law.

#### The Penalties

The law stipulates "imprisonment for a term which shall not be less than one year but which may extend to seven years and with fine which shall not be less than five thousand rupees but which may extend to fifty thousand rupees", as punishment for violations. The law is to implemented by the state police with the appointment of vigilance officers under the law at police stations. Though the Congress facilitated the passage of the Karnataka Prevention and Eradication of Inhuman Evil Practices and Black Magic Act, 2017 and created rules, the law was not notified until January 2020 since there were concerns of the political fallout of the implementation of the law in the run up to the 2018 Assembly elections — which the party eventually lost. The BJP, which was able to get much of its concerns over the law addressed during the drafting phases, has now notified the law and put itself in a position to implement the law according to rules framed under the law.

# Compromising Scientific Curiosity for Marketability (C.P. Rajendran - Professor at The Jawaharlal Nehru Centre for Advanced Scientific Research)

→ At the recently concluded 107<sup>th</sup> Science Congress in Bengaluru, the customary inaugural address by the Prime Minister reflected the government's take on how science should be conducted in India. This was conveyed when he said young researchers should "innovate, patent, produce, prosper". The present government has been directing laboratories and other research centres to earn their own revenue from external sources by marketing their expertise and investing the surplus to develop technologies for national missions. This policy position can be traced to the 'Dehradun declaration' prepared by the directors of the CSIR labs in 2015, where it was decided to market patents as a means to self-finance research. This market-driven revenue model is expected to encourage the research centres, including the universities, to reorient themselves to conduct what is marketable. This trend towards commercialisation of science started much earlier. In the 1990s, CSIR director general R.A. Mashelkar mandated labs to generate intellectual property and file patents. Consequently, there has been a steady decline in government expenditure in higher education and research, reflecting this changed stand on making the government labs financially autonomous and leaving their fortunes to be determined by the market forces. There is a genuine concern among the researchers and academics that this transformation will have serious repercussions for India's competence in research.

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## History of The Debate

The modern debate about basic versus applied sciences was started in the early 1940s by British physicist John D. Bernal who proposed that science should serve the nation and the material needs of its citizens. A main tenet of this argument was that scientists should first pass the test of whether their chosen research topics would be beneficial from the perspective of societal needs. But Bernal's ideas were promptly opposed by a group of researchers, led by the zoologist John R. Baker by forming the Society for Freedom in Science. In an article published in the journal Nature in 1944, the Society emphasised that scientific life should be autonomous and workers should be given enough freedom to choose their own problems.

Thus, it appears that scientific research world over is under the threat of increasing commercialisation, primarily spearheaded and fast-forwarded by the new age politicians. The implicit assumption is that the research institutes and universities in course of time will transform into something like service centres that will be more equipped to address the economic growth and social needs. By encouraging intellectual property and by creating spin-off companies, many centres of learning are busy attempting to recast their images to meet such demands.

#### Dismal R&D Spending

Science is essentially an end-product of human curiosity and a desire to understand the world. Thus, an increasing emphasis on immediate applicability of science should not be allowed to steal the space of curiosity-driven basic science which can be sustained only by direct government funding. Further, the question is whether a blind and hasty copying of this Bernalian model of science will be beneficial for scientific growth in India. We must first assess the objective conditions of higher education and research institutions. Where do we stand in research and development (R&D) in comparison to other countries? Besides the 40 CSIR laboratories and a few premier research institutions like the Indian Institute of Science and the Indian Institutes of Technology, there are over 600 universities, meeting the educational requirements of about 29 million students. But hardly any international-level research is done in the universities. Our impact on global science continues to be minimal, except for a few isolated bright spots. Government spending in R&D has continued to remain static for about a decade, at a paltry 0.9% of the GDP, as compared to China, whose spending during the 2000-2017 period grew at an average of 17%, its growth being more than that of the U.S. The situation is so dire in India that even the country's premier technology colleges, the Indian Institutes of Technology, are reaching out to their alumni for funds. As for developing self-financing models for government labs, the government should tread its path slowly and selectively looking at the strengths and weaknesses of each of the institutes. It will be counterproductive to implement a one-size-fits-all solution in a hasty manner. The immediate priority in this regard should be to increase the government funding in higher education and R&D.

# Crisis Along the Coast

→ Kerala is grappling with over 26,000 reported instances of CRZ violations in the State. Billionaire industrialists, hoteliers and riverside resort owners are on the list of violators. The magnitude of the violations and possible legal actions are likely to snowball into a socioeconomic and legal crisis in the coastal State, which is yet to recover from the shock of the

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recent demolition of four skyscrapers constructed at Maradu in Kochi in violation of the CRZ rules, following an order from the Supreme Court. Four illegal apartments, which came up on the banks of the Vembanad Lake, a Ramsar site, were pulled down in two days after evicting its residents. But things did not end there. On January 10, on the eve of the demolition of two apartment complexes, the Supreme Court struck another blow for CRZ rules by ordering the demolition of Kapico Resorts, 54 seven-star villas built on an island in Vembanad Lake. The nearly ₹600 crore resorts came up by illegally reclaiming Nediyathuruthu, an island in the lake, which has been classified as a Critically Vulnerable Coastal Area. The ecological significance of the Vembanad Lake system has been reiterated by the CRZ notifications time and again. The 2019 notification too listed Vembanad as a Critically Vulnerable Coastal Area and clubbed it along with the Sundarbans of West Bengal and the Gulf of Khambhat and the Gulf of Kutch of Gujarat. Section 3.1 of the CRZ rules states that critically vulnerable coastal areas should be managed with the involvement of coastal communities, including fisherfolk who depend on coastal resources for their sustainable livelihood. The present list of violations was drawn up after an affidavit was submitted by the Kerala Chief Secretary in the Supreme Court during the Maradu case hearing. The court was assured that all such violations would be identified, and the officials and builders who facilitated them taken to task. Incidentally, this is the first time there is judicial scrutiny by the apex court of CRZ violations in the State. Since the notification issued on February 19, 1991, the development paradigm of coastal areas has been defined by CRZ norms. The CRZ rules were notified by invoking Section 3 of the Environment (Protection) Act, 1986. The notifications were issued "to conserve and protect the unique environment of coastal stretches and marine areas, [the] livelihood security of fisher communities and other local communities, and to promote sustainable development" by taking into account the dangers of natural hazards and sea-level rise due to global warming. The notification "declared the coastal stretches of the country and the water area up to its territorial water limit, excluding the islands of Andaman and Nicobar and Lakshadweep and the marine areas surrounding these islands, as Coastal Regulation Zone." The CRZ-1 areas are the most environmentally critical. They are further classified as CRZ-1(A) and CRZ-I(B). CRZ-1(A) covers mangroves, corals and coral reefs, sand dunes, biologically active mudflats, inter-tidal zones, and nesting grounds of turtles and birds. It also includes national parks, marine parks, sanctuaries, reserve forests, wildlife habitats and other protected areas, biosphere reserves, salt marshes, sea grass beds and areas or structures of archaeological importance and heritage sites. The CRZ-1(B) category includes the intertidal zone, the area between the Low Tide Line and the High Tide Line. The High Tide Line is defined as the line on the land up to which the highest water line reaches during the spring tide. The line is demarcated by the National Centre for Sustainable Coastal Management. The notification also prescribes restrictions and regulations for construction and development activities in each zone. There are permissible and non-permissible activities in each zone. Prior clearance from the State Coastal Zone Management Authority is to be obtained before initiating any development activity. The third notification, the latest, was issued on January 18, 2019. A no objection certificate from the State Coastal Zone Management Authority is a prerequisite for a coastal local body for approving a building plan in the CRZ area, explains a senior functionary of the Kerala Coastal Zone Management Authority (KCZMA). Maradu demolitions and the Supreme Court order in the Kapico case, he says, are defining moments in the State's environmental history, where the long arm of law caught up with the violators, though a decade later. The dust may have settled on the Maradu demolitions, but processing the nearly 26,000 cases of suspected CRZ

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violations will be a backbreaking exercise for the Environment Department. Special teams may have to be formed for scrutinising the list, which was compiled by the district committees formed in the 10 coastal districts. With local body elections due in the State in another eight months and Assembly elections next year, both the ruling front and the opposition are likely to tread a careful path on this sensitive issue. With the list of violations to be submitted before the Supreme Court, the State will have a lot of explaining to do. Tough questions are likely to come up in the courtrooms in the coming days.

#### Lack of Experts?

At the same time, there is criticism over the manner in which the list of violations was drawn up. Though committees were constituted to identify the violations, they didn't have any experts familiar with the CRZ rules, says K.V. Thomas, former head of the Coastal Process Group of the National Centre for Earth Science Studies, Thiruvananthapuram. Thousands of cases of illegal reclamation of coastal wetlands might have escaped the attention of the committee members as the focus was on the buildings that came up in the CRZ areas. The absence of experts would have helped major violators escape scrutiny; he says. As the CRZ notifications have classified the coastal areas into different zones based on their ecological significance, the violations should also be classified based on the zones where they have been identified. There should not be any compromise on the violations reported in Zone 1, says Thomas. The violations which are listed as prohibited activities in the CRZ notifications should be treated separately, he says. The list should be critically evaluated by expert teams comprising representatives of the Coastal Zone Management Authority, the Chief Town Planner, and various stakeholders. Also, the draft list should be put up for a social audit, Thomas suggests. Charles George, the State president of Kerala Matsya Thozhilali Aikya Vedi, who has been in the forefront of many a battle against the CRZ violations, says the list was drawn up mostly by revenue officials. The team was handicapped by the absence of CRZ experts, he says. Geographically, Kerala is sandwiched between the hill ranges of the Western Ghats and the sea, says the official. There are many environment laws that cover both the mountain chain and the coastline, placing curbs on the areas available for development. Regarding CRZ violations, the law makes no distinction between small-scale violations and larger ones by commercial groups. The question before the government is regarding the approach to these violations, says the official.

# The Gulf Between Rich and Poor, Men and Women, Globally

→ A report published by Oxfam, the international non-profit focussed on the alleviation of global poverty, underlined what has been said repeatedly by governments, research organisations and a range of multilateral bodies over the past decade or more — that economic inequality, as the report said, "is out of control", with extremes of wealth existing alongside great poverty. "This great divide", the Oxfam report said, "is based on a flawed and sexist economic system" which has "accumulated vast wealth and power into the hands of a rich few, in part by exploiting the labour of women and girls, and systematically violating their rights". The report, titled Time to Care: Unpaid and Underpaid Care Work and the Global Inequality Crisis, released ahead of the 50<sup>th</sup> Annual Meeting of the World Economic Forum (WEF) beginning in Davos, also said that India's richest 1% hold more than four times the wealth held by the 953 million who make up for the bottom 70% of the country's population.

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#### How Badly Off Are Girls and Women as Compared to Men?

- Globally, extreme poverty rates are 4% higher for women than men; this gap rises to 22% during women's peak productive and reproductive ages; that is, 122 women aged 25-34 for every 100 men of the same age group live in extremely poor households, largely due to childcare responsibilities.
- \$10.8 trillion is the estimated minimum annual monetary value of the unpaid care work by women aged 15 and above globally — this is three times the size of the world's tech industry.
- Women do 12.5 billion hours of unpaid care work every day, equivalent to 1.5 billion people working 8 hours a day with no remuneration.
- Globally, 42% of working age women are outside the paid labour force, compared with 6% of men, due to unpaid care responsibilities.
- 80% of the estimated 67 million domestic workers worldwide are women. An estimated 90% of domestic workers have no access to social security such as maternity protection and benefits.
- Worldwide, girls aged 5-9 and 10-14 spend on average 30% and 50% more of their time respectively on unpaid care work than boys of similar ages.

#### What New Monsoon Dates Mean?

→ Earth Sciences Secretary M Rajeevan announced that the India Meteorological Department (IMD) had decided to revise the normal onset and withdrawal dates for the monsoon in some parts of the country from this year. The four-month southwest monsoon season, which brings as much as 70 per cent of the country's annual rainfall, officially begins on June 1, with the onset over Kerala, and ends on September 30. It takes about a month and half after onset on the Kerala coast to cover the entire country; and about a month, beginning from the north-western parts of the country on September 1, to withdraw completely. Although the June 1 date for the onset of the monsoon on the Kerala coast is unlikely to be changed, the dates for onset in many other parts of the country are expected to be revised. Mumbai, for example, expects to start getting rain from June 10 — the revision is likely to push this date back by a few days. Adjustments are likely to be made for many other parts of the country as well. Similar changes are expected in the withdrawal dates. Effectively, the monsoon is now expected to have later arrival and withdrawal dates in most parts of the country.

# Why Was This Revision Needed?

The main reason for the revision in the normal dates is the changes in precipitation patterns that have been taking place over the last many years. In the last 13 years, for example, only once has the onset over the Kerala coast happened on June 1. While two or three days of earlier or later onset falls within the yearly variability, in several years the onset happened five to seven days late. Similarly, the commencement of withdrawal has happened in the first week of September only twice during this period, and last year, the withdrawal started as late as October 9 — and was completed in around just a week. "This change (of dates) was inevitable because things have been different for more than a decade now. A delayed onset seems clear but the withdrawal is never dramatic, and it may be conflating with the northeast monsoon (winter monsoon, which begins in October) in some places. So, we have to watch how the monsoon trough and the monsoon rain itself are related in September and October. Is it still monsoon if the trough has retreated but rainfall is occurring over some parts of

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India? This question has not been considered seriously so far," said Raghu Murtuggude of the University of Maryland, College Park, United States. Within the four-month season too, rainfall has been observed to deviate from normal expected patterns very frequently. One of the significant changes being noticed is that rainfall is getting increasingly concentrated within a narrow band of days within the monsoon season. So, there are extremely wet days followed by prolonged periods of dry days. A report in this newspaper in September 2018 used IMD data to show that over several previous years, nearly 95 per cent of monsoon precipitation in 22 major cities of the country had happened over a period of just three to 27 days. Delhi, for example, had received almost 95 per cent of its monsoon rainfall over just 99 hours. And half of Mumbai's monsoon rain had fallen over just 134 hours, or five and a half days, on average. Patterns of regional variations in rainfall are also changing. Areas that have traditionally received plenty of rainfall are often remaining dry, while places that are not expected to get a lot of monsoon rain have sometimes been getting flooded. Climate change could be one of the factors driving these changes, but there could be other reasons as well.

#### What Will Be the Impact of IMD's Move?

The revisions are meant to reflect the changes in precipitation patterns in recent years. They will help the IMD track the monsoon better, and improve what Rajeevan described as its "impact-based" forecasts. But the revisions will have implications beyond IMD's operations, too. New dates will likely nudge farmers in some parts of the country to make slight adjustments in the time of sowing their crops. Agro-meteorologists, however, agree that more than the onset, it is the information about the spatio-temporal distribution of rainfall that will be more helpful for farmers. "A timely onset of rainfall followed by a prolonged break in the rains wou<mark>ld mean that the sown seeds would not</mark> benefit. So, even if there is a delay in the arrival of monsoon by three to four days over a region, it would not matter much if there is a fairly good rainfall distribution thereafter,". Ghosh said crops that need transplantation, such as rice, require advance knowledge about the arrival of rain. "If the rainfall over the rice-growing regions occurs very late, then the transplantation of rice would be affected, which in turn could hit the crop yield. However, sometimes, a slight delay in sowing can save the crop," Ghosh said. Rajeevan said the change in dates would affect water management practices as well. "Water management agencies, for example those managing the dams in the central plains, should now expect more rain only in the latter part of June. Instead of planning only until the start of June, they would now be prompted to preserve and hold on to some water until later in the month. Similar adjustments would need to be made towards the end of the monsoon season as well," he said. The planning that goes to beat the heat — several cities execute heat action plans — just ahead of the monsoon would have to factor in the need to be prepared for longer periods of heat. Rajeevan said many other activities including industrial operations, the power sector, or those using cooling systems, would also need to change their behaviour. The power grid can, for example, have more realistic planning for peak periods of electricity consumption in certain months. Ultimately, the change in normal dates of the onset and withdrawal of the monsoon would help people understand when to expect rains, and to plan their activities accordingly. The changed dates are expected to be announced in April, when the IMD makes its first forecast for the monsoon.

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## Drone Census: Over 2,500 Disclosures So Far

India's first drone census has seen over 2,500 Ownership Acknowledgment Numbers (OANs) being issued by the Ministry of Civil Aviation (MoCA) in the last five days. The exercise will give the government a picture of who owns what kind of drone in which part of the country and will help in making policy decisions that should ideally become the base for understanding the scale of operations. The Ministry issued a notice providing a one-time opportunity for voluntary disclosure of all drones and operators starting from January 14. While the DGCA issued the Civil Aviation Requirements (CAR), Section 3 - Air Transport Series X, Part I, Issue I, dated August 27, 2018 which regulates use of drones and provides the process for obtaining Unique Identification Number, Unmanned Aircraft Operator Permit (UAOP) and other operational requirements, there are drones that do not comply with the CAR. Along with registrations, officials said a larger number of gueries and suggestions had landed at the drone cell. "While no proof of purchase is being sought, all registrations after February 1 will have to be accompanied by an invoice." As the census led to confusion and myths making the rounds, the Drone Federation of India — a non-government, not-for-profit, industry-led body working in the unmanned aviation space — issued a fresh set of FAQs. An official said there was a myth that enlisting of a drone would lead to its confiscation. "In reality, if a drone is not enlisted by 5 p.m. on January 31, then it will most definitely be confiscated. Plus, there would be other consequences as per law," the official said. After January 31, only authorised retailers will be allowed to sell them after uploading buyers' Know your Customer (KYC) and sale invoice, similar to sale of mobile phones and cars.

## Submarine-Launched Ballistic Missile Tested

→ India successfully test-fired the 3,500-km range submarine-launched ballistic missile, K-4, official sources confirmed. The test was carried out by the Defence Research and Development Organisation (DRDO) from a submerged pontoon off the Visakhapatnam coast. "The test was conducted from a submerged pontoon and has met the desired parameters. A pontoon simulates the situation of a launch from a submarine,". The missile has been tested several times earlier as part of developmental trials to validate different parameters, the source said. "The missile ejecting from a submerged platform to the surface (sea) is the toughest part." There are very few countries which have managed to achieve this technological breakthrough, a second official source said. "Our Circular Error Probability (CEP) is much more sophisticated than Chinese missiles," the source said. The CEP determines the accuracy of a missile. The lower the CEP, the more accurate the missile is. Once inducted, these missiles will be the mainstay of the Arihant class of indigenous ballistic missile nuclear submarines (SSBN) and will give India the stand-off capability to launch nuclear weapons submerged in Indian waters. INS Arihant, the first and only operational SSBN, is armed with K-15 Sagarika missiles with a range of 750 km.

# Field Marshal KM Cariappa: Political Ambition as Well as Mistrust of Politicians

→ The discovery of a clarificatory note by the late Field Marshal K M Cariappa in the state archives in Karnataka has shone new light on his views in 1971 about the state of India's democracy, political parties, and linguistic states. He wanted them abolished, and to have "President's cum Military Rule" for five years to set things right. The Army's first Indian Commander-in-Chief appears to have arrived at this view fairly early in his career. The National Archives of India contain a letter by one Major A A Khan to the then Brigadier

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Cariappa, which refers to a meeting during which the two officers had "agreed that if our statesmen cannot agree, then they should hand over the country to the army and we will show them how to run it". The letter is dated May 18, 1947, when Cariappa was taking a course at the Imperial Defence College in the United Kingdom. According to the letter, the meeting in question took place earlier that same month. At a meeting with Sir Hastings Ismay, Viceroy Lord Mountbatten's Chief of Staff, in London on May 9, 1947, Cariappa suggested a role for the military in the government of independent India. This followed Cariappa's remark at the Defence College that the British Indian Army should not be partitioned — which allowed Liaquat Ali Khan (who became the first Prime Minister of Pakistan) to argue with Mountbatten that the senior most Indian officer wanted military rule. "Cariappa came to see me yesterday and volunteered the amazing suggestion that Indian Army with either Nehru or Jinnah should take over power when we left in June 1948," Ismay said in his telegram to Mountbatten. "It is hard to know whether Cariappa in putting forward this idea was ingenious and ignorant or disingenuous and dangerous or both." In India After Gandhi: The History of the World's Largest Democracy, Ramachandra Guha wrote that while Cariappa restricted himself to military matters at the beginning of his tenure as C-in-C in 1949, he soon began to offer his views on such questions as India's preferred model of economic development. On October 13, 1952, Nehru wrote to Cariappa, advising him to hold fewer press conferences and, at any rate, to stick to safe subjects. The Prime Minister enclosed a letter from a cabinet colleague, which complained that Cariappa was "giving so many speeches and holding so many press conferences all over the country", that it appeared he was "playing the role of a political or semi-political leader". After Nehru appointed Cariappa India's High Commissioner to Australia within three months of his retirement in 1953, which led Cariappa to tell the Prime Minister that "by going away from home to the other end of the world for whatever period you want me in Australia, I shall be depriving myself of being in continuous and constant touch with the people". During a visit to Pakistan in 1958, Cariappa publicly praised the military coup by Ayub Khan, his former colleague in the British Indian Army, saying it was "the chaotic internal situation which forced these two patriotic Generals to plan together to impose Martial Law in the country to save their homeland from utter ruination". Cariappa went on to claim that for these Pakistani generals, "war between India and Pakistan was simply unthinkable". Earlier, in mid-1965, Cariappa had written in Indian Express newspaper that a two-year period of President's Rule might be needed to restore order and proper standards of administration. The article provoked 13 opposition legislators to move two privilege motions in the Andhra Pradesh Assembly against Cariappa and the Editor-in-Chief, seeking to impeach them for contempt of the House. Speaker B V Subba Reddy exonerated them both in a 2,500-word ruling that agreed with Chief Minister K Brahmadanda Reddy that "it would be more in keeping with the dignity and prestige of the House to ignore the objectionable passages in the article by General Cariappa". After the Congress government criticised his remarks to the press in 1970, Cariappa spoke of entering politics himself. He was supported by a large number of retired military officials, including Lt Gen S P P Thorat, Air Marshal Ranjan Dutt, Rear Admiral S G Karmarker, who told reporters in February 1971 that they "felt that the General's entry into politics would provide an element missing in the Indian political scene". Cariappa contested the 1971 Lok Sabha election from Bombay North East as an Independent, and finished third (90,110 votes) behind Mukundrao Sundarrao Agaskar of the Bharatiya Jana Sangh (1,08,513) and the winner, Rajaram Gopal Kulkarni of the Congress (2,83,792). In his

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farewell speech in 1953, however, Cariappa had told his soldiers that the Army's job was not "to meddle in politics but to give unstinted loyalty to the elected government".

## Ram, Ramasamy and Rajini

→ Tamil film actor Rajinikanth has courted controversy with his remark that at a rally in Salem district in 1971, attended by Dravidar Kazhagam (DK) founder Periyar E.V. Ramasamy, "naked" images of Lord Rama and his consort Sita were paraded with a garland of slippers. He said "no other publication... reported this" except Thuglak magazine, founded by Cho S. Ramasamy, which also critically commented on it. Leaders of the DK and its splinter groups accused Mr. Rajinikanth of spreading falsehood. They denied that "naked" images of the two deities were taken in a procession. A recounting of what happened at the procession in 1971 and the reactions to it, as published in The Hindu, would throw light on the incidents of that year.

#### Controversial Tableaux

In an article titled Demonstration against obscene tableaux in The Hindu on January 25, 1971, the Salem correspondent reporting on the 'Superstition Eradication Conference' organised the previous day by the DK, wrote: "The tableaux included obscene pictures of the birth of Lord Muruga, penance of sages and Mohini Avatara, a 10-foot long image of Lord Rama was carried on a vehicle and dozens of people kept beating it with chappals". The report added that Periyar "seated on a tractor, was at the rear of the procession". An image of Lord Rama cut out in wood was set on fire at the end of the procession. The conference passed a few resolutions including one requesting the government "to take suitable steps to see that coveting another man's wife is not made an offence under the Indian Penal Code". T.V. Chokkappa, chairman of the reception committee of the Conference, in a letter to The Hindu, took exception to the report. He said that the resolution spoke of "a married woman trying to be intimate with a person other than her husband... The difference in the texts... is not one of tweedledum and tweedledee but vital". Responding to this, the Salem Correspondent asserted that the report was accurate and went on to state that Periyar had said "one should not seduce a minor girl; it was kidnapping and also an offence. But there was nothing wrong in an individual loving intensely another man's wife who is well grown up and also is a major. If the wife of the man also reciprocates the love, they should be allowed to marry one another and the husband should not prevent or obstruct their marriage." The original report also cited another resolution urging "the government to allow free criticism of religious practices of people of various faiths including Islam, Christianity and Hinduism." A report published in The Hindu on January 31, 1971 said Chief Minister M. Karunanidhi, commenting on the procession and the tableaux, told journalists in Madurai that Periyar had the right to think on revolutionary lines, but no government would be prepared to implement all his revolutionary ideas. The report added: "The Chief Minister said he was sorry to learn from newspaper reports about the obscene tableaux in the DK-sponsored procession and the police permitting the procession. The feelings of some people would have been hurt and he could quite understand it."

## Criminal Complaint

Chokkappa filed a complaint against The Hindu, The Indian Express and Dinamani saying that he and the party to which he belonged had been defamed by news reports in these

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publications. He objected to The Hindu's version of the resolution on the demand to decriminalise "coveting another man's wife". On an appeal by the three publications challenging the suit, a three-judge bench of the Supreme Court, on September 4, 1972, quashed the criminal proceedings initiated by a Madras Magistrate against the dailies on charges of defamation.

## Contesting Claims Over Sai Baba

Maharashtra Chief Minister Uddhav Thackeray met representatives from the temple town of Shirdi, who have been upset over the government's decision to develop Pathri in Parbhani district as the birthplace of Sai Baba. Shirdi MLA Radhakrishna Vikhe Patil said the meeting was "positive", and the agitation would be withdrawn. On January 9, Thackeray announced in Aurangabad that his government would grant ₹100 crore for the development of Pathri as a centre of religious tourism and "the birthplace of Sai Baba". The plan was originally mooted over three years ago when Devendra Fadnavis was CM, after President Ram Nath Kovind, who was then the Governor of Bihar, visited Pathri in January 2016 and promised local leaders that he would take up the issue of infrastructure in the town with the state government. Thackeray's announcement triggered joy and hope in Pathri, a town of 40,000 people about 180 km to the southeast of Aurangabad. In Shirdi, located about 125 km to the west, however, there was anger — and residents of the town that has become synonymous with Sai Baba announced an indefinite bandh in protest.

## Pathri: What Records Say

In 1975, V B Kher, a Sai devotee and former trustee of the temple trust in Shirdi, announced that it was "probable" that the 19<sup>th</sup> century saint was bo<mark>rn</mark> in a Yajurvedi Deshastha Brahmin family in Pathri as one of the five sons of one Parshuram Bhusari. In 1978, a trust, the Shri Sai Smarak Samiti, was established to build a temple to Sai Baba at the site where some believed he was born. In fact, several authoritative, popular works on Baba either directly mention Pathri as his possible birthplace, or speculate that he may have been from that area. Some of these works were either written by, or quoted those who knew Baba personally. Baba is said to have come to Shirdi in 1872, where he lived until he took mahasamadhi (passed away) on October 15, 1918. The introduction — written by Hari Sitaram Dikshit alias Kakasaheb — to the Shri Sai Satcharita mentions Pathri. The Shri Sai Satcharita, written in Marathi verse by Govind Raghunath Dabholkar alias Hemadpant, was the first biography of the saint, and was serialised in the Sai Leela magazine. Both Dikshit and Dabholkar were close aides and devotees of Baba. Dikshit, who gave up his law practice and political activities as a Congress member of the Bombay Legislative Council to serve Baba, is credited with establishing and running the Shirdi Saibaba Sansthan in its intial days. His introduction to the Shri Sai Satcharita, which reportedly appeared in 1923, said: "Sri Sainath Maharaj came to Shirdi about 50 years ago. Shirdi is located in Rahata taluka of Ahmednagar district. There's no reliable information on his place of origin and his parentage. However, it can be said with certainty that he must have some links with Nizam's state. In his conversations, there were often references to places like Selu, Jalna, Manwat, Pathri, Parbhani, Aurangabad, Bhir and Bedar. Once a visitor from Pathri came to Shirdi for Sai Baba's darshan. Sai Baba enquired about several prominent persons by naming them. This leads one to believe that he had special knowledge of Pathri. However, it can't be stated with surety that he was born there." Baba's "great apostle" B V Narsimha swami wrote in his book that the saint discouraged

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questions on his parentage, and when pressed, gave mystifying answers. However, the book quotes Mhalsapaty, a Shirdi goldsmith who was among Baba's earliest devotees, as saying that on a "momentous occasion" very late in Baba's life, the saint had told him (Mhalsapaty) that his parents were "Brahmins in Patri in Nizam's state". In a chapter titled 'Baba's Earliest Period' in Vol I of his four-volume tome written in the late 1950s, Narsimha swami said: "Patri is part of Parvani taluk, and near Manwath. Sai Baba added (in explanation of the fact that he was living in a mosque) that while still a tender child his Brahmin parents handed him over to the care of a fakir who brought him up... Sai Baba occasionally showed interest in Patri and Parvani when people from those parts came to him, (but)... this is practically all that we have about the birth and parentage of Sri Sai Baba." Kher, the first person who claimed to have somewhat resolved the mystery and zeroed in on a family in Pathri to which, he believed, Sai Baba "probably" belonged, started his probe from where those before him had left. In June 1975, Kher arrived in Pathri and interviewed locals who told him anecdotes about Baba being born in a Brahmin family, and that he was taken away by a Muslim wali when he was a child. Elders of the local Brahmin community told Kher that they believed Baba was born in the Bhusari family house in Vaishnav Galli. Kher found the house empty and in ruins, but managed to contact a member of the family, Raghunath Bhusari, who had retired as a professor of Marathi in Hyderabad's Osmania University. Prof Bhusari helped Kher chalk out a family tree going back three generations to the individual who could have been Baba's father. Bhusari told Kher that he had heard from his grandmother that of the five sons of his great grandfather Parshuram, three had left home very young. One of them, "Haribhau", had left in search of God. "Could it not be that Haribhau Bhusari was Sai Baba? I wonder. The theory advanced above is probable. I discussed it jointly with an experienced lawyer and a reputed historian, and both of them agreed that it could be so. I do not wish to add anything further; I leave the matter to the readers to judge for themselves," Kher wrote. Later, Kher and Pathri resident Dinkar Chaudhari bought the Bhusari family house and established the Shri Sai Smarak Samiti. The trust built a temple at the site, which was inaugurated in 1999.

#### Devotee vs Devotee

Abdullah Khan Durrani, a senior NCP leader who has controlled Pathri Municipal Council for over three decades and has been a member of the Shri Sai Smarak Samiti Trust since 1978, said local people had met President Kovind four years ago. "He was Bihar Governor when he visited the temple. We apprised him of the inconvenience that devotees faced because the temple has a very narrow approach road, and there are no proper places for devotees to stay. Kovindji had called (then CM) Devendra Fadnavis and requested him to do something to improve the situation. We met Fadnavisji in Mumbai, and he told us to prepare a development plan, and that he would grant ₹100 crore. The Pathri Municipal Council prepared the plan, but it was not sanctioned due to opposition from the people of Shirdi. Now, Uddhavji has made the announcement and we are sure the plan will go ahead." Durrani, who is a member of the Maharashtra Legislative Council, said the people of Shirdi had no reason to feel insecure. "Shirdi is Baba's Karmabhoomi. Pathri is his Janmabhoomi. Even now about 1,500-2,000 devotees visit the temple in Pathri every day; it does not mean that they don't want to go to Shirdi," he said. But the residents of Shirdi argue that if Baba wanted his roots to be known, he would have announced it himself. "There is no point in looking for his birthplace. There will be many claimants. We don't mind if Pathri is given ₹100 crore or even ₹1,000 crore. What we are objecting to is the claim that Baba was born in Pathri.

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It appears to be a conspiracy to spread a wrong message among Baba's devotees," Sachin Tambe, a former trustee of Saibaba Sansthan Shirdi, said.

## Relics of A Vakataka Dynasty, Decoded

→ Recent archaeological excavations at Nagardhan in Ramtek taluka, near Nagpur, have provided concrete evidence on the life, religious affiliations and trade practices of the Vakataka dynasty that ruled parts of Central and South India between the third and fifth centuries. After a 1,500-year-old sealing was excavated for the first time, a new study in Numismatic Digest has tried to understand the Vakataka rule under Queen Prabhavatigupta.

#### What Is the Excavated Site?

Nagardhan is a large village in Nagpur district, about 6 km south of Ramtek taluka headquarters. Archaeological remains were found on a surface spread over a 1 km × 1.5 km area. The researchers excavated the site during 2015-2018. A Koteshwar temple dating back to the 15<sup>th</sup> -16<sup>th</sup> centuries stand on the banks of a stream. The existing village sits on top of the ancient habitation. The Nagardhan Fort stands south of present-day Nagardhan village. This was constructed during the Gond Raja period and later renovated and re-used by the Bhosales of Nagpur during the late 18<sup>th</sup> and 19<sup>th</sup> centuries. The area surrounding the fort is under cultivation and has archaeological remains.

#### Why Is the Excavation Important?

Very little was known about the Vakatakas, the Shaivite rulers of Central India between the third and fifth centuries. All that was known about the dynasty, believed to hail from the Vidarbha region, was largely through some literature and copperplates. There were assumptions that the excavated site of Nagardhan is the same as Nandhivardhan, the capital city of the eastern branch of the Vakatakas. It was after archaeological evidence from here that Nagardhan was understood to have served as a capital of the Vakataka kingdom. Scholars say archaeologists who had previously excavated the site had not done detailed documentation; thus, an archaeological exploration was needed.

## What Is the Significance of These Finds?

It is the first-time clay sealings have been excavated from Nagardhan. The oval-shaped sealing belongs to the period when Prabhavatigupta was the queen of the Vakataka dynasty. It bears her name in the Brahmi script, along with the depiction of a conch. The 6.40-gram sealing, which is 1,500 years old, measures 35.71 mm by 24.20 mm, with a thickness of 9.50mm. The presence of the conch, scholars say, is a sign of the Vaishnava affiliation that the Guptas held. The sealing was traced on top of a mega wall that researchers now think could have been part of a royal structure at the capital city of the kingdom. So far, no archaeological evidence had emerged about the types of houses or palatial structures of the Vakataka people or rulers. The copperplate issued by Queen Prabhavatigupta starts with a genealogy of the Guptas, mentioning the Queen's grandfather Samudragupta and her father Chandragupta II. These are strong indicators of Vaishnava signatures on the royal seals of the Vakatakas, reiterate that Queen Prabhavatigupta was indeed a powerful woman ruler. Since the Vakataka people traded with Iran and beyond through the Mediterranean Sea, scholars suggest that these sealings could have been used as an official royal permission

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issued from the capital city. Besides, these were used on documents that sought mandatory royal permissions.

#### Why Are the Findings on Queen Prabhavatigupta Significant?

The Vakataka rulers were known to have forged several matrimonial alliances with other dynasties of their times. One of the key alliances was with Prabhavatigupta of the mighty Gupta dynasty, which was then ruling north India. The Guptas, researchers say, were way more powerful than the Vakatakas. After marrying Vakataka king Rudra Sena II, Prabhavatigupta enjoyed the position of Chief Queen. When she took over the Vakataka kingdom, after the sudden demise of Rudra Sena II, her stature as a woman Vakataka ruler rose significantly. This is evident from the fact that the sealings were introduced and issued during her period as a ruler, that too from the capital city of Nagardhan. Scholars say Queen Prabhavatigupta was among a handful of women rulers in India to have reigned over any kingdom during ancient times. Also, there had been no evidence so far of any successor female ruler within the Vakataka dynasty, the researchers suggest.

#### Why Is the Sign Of Vaishnava Affiliation Important?

The Vakataka rulers followed the Shaiva sect of Hinduism while the Guptas were staunch Vaishnavites. Excavators say that many religious structures indicating affinity to the Vaishnava sect, and found in Ramtek, were built during the reign of Queen Prabhavatigupta. While she was married into a family that belonged to the Shaiva sect, the queen's powers allowed her to choose a deity of worship, that is, Lord Vishnu. The researchers believe that the practice of worshipping Narasimha in Maharashtra emerged from Ramtek, and that Queen Prabhavatigupta had a pivotal role in propagation of Vaishnava practices in the Vidarbha region of Maharashtra. Some of the temples identified as Keval Narasihma, Rudra Narasimha and the one dedicated to Varaha could be traced to Ramtek, and showcase strong affinity to the incarnations of Lord Vishnu. None of these religious structures was, however, present here until the Queen took the throne. Queen Prabhavatigupta ruled for about 10 years until her son Pravarasena II succeeded.

#### What Else Has Been Excavated from Nagardhan So Far?

An intact idol of Lord Ganesha, which had no ornaments adorned, too was found from the site. This confirmed that the elephant god was a commonly worshipped deity in those times. On the means of living of the Vakataka people, researchers found animal rearing to be one of the main occupations. Remains of seven species of domestic animals — cattle, goat, sheep, pig, cat, horse and fowl — were traced in an earlier study by the team.

## **Business & Economics**

## **Unfounded Optimism**

→ As a report card-cum-blueprint for the future, Chief Economic Adviser (CEA) Krishnamurthy Subramanian's Economic Survey 2019-20 is a mixed bag of interesting diagnosis combined with some optimistic prognostication. Seven months after his maiden survey, he finds himself again having to assess the economy's health and provide signposts for the agenda

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ahead. And the CEA, who in July projected real GDP growth rebounding to 7% this fiscal, acknowledges that 2019 was a difficult year for the global economy, including for trade and demand, and by extension a challenging period for the Indian economy as well. The Survey concedes that "a sharp decline in fixed investment induced by a sluggish growth of real consumption" has weighed down growth, which the National Statistical Office now estimates at 5% for the 12 months ending in March. The stress in the non-bank financial industry and decline in credit growth that the IMF flagged in January when it cut its India growth estimate for the current fiscal to 4.8%, from October's 6.1%, find reflection in the Survey. Interestingly, a chapter devoted to "Financial fragility in the NBFC sector" recommends a dynamic health index that policymakers can use as an early warning system to avert incipient liquidity crises in this key credit providing sector. Listing downside risks to next fiscal's outlook including continuing global trade uncertainties, escalation in West Asian geopolitical tensions, slow pace of insolvency resolution and the possibility of further fiscal pressure crowding out private investment, the CEA, however, takes a leap of faith. In forecasting growth rebounding to a 6.0-6.5% range, he reiterates an expectation from his previous survey: given the government's strong mandate, it ought to expedite reforms. The Survey also makes a political statement on Budget eve. Expect more policy incentives for "Wealth creation". Featuring as a central theme of the first volume, the Survey asserts that India's vaunted historical economic dominance was reliant "on the invisible hand of the market for wealth creation" supported by ethical practices that engendered trust. To ensure smoother functioning of markets as creators of wealth, the Survey makes several policy prescriptions. Contending that government interventions hurt more than they help, it recommends scrapping the Essential Commodities Act — enacted in 1955 when famines and shortages were the concern. Similarly, it asserts that the Drug (Prices Control) Order of 2013 has failed to achieve its aim of making drugs affordable and needs to go. And the CEA wants a complete review of the policy on foodgrains, which he argues has made the government the largest "hoarder" thereby distorting these markets. All are suggestions that traders and market players, a key electoral constituency, will cheer, but may be fraught with risks.

## Privatisation: Survey Suggests New Vehicle

The Economic Survey has aggressively pitched for divestment in public sector undertakings (PSUs) by proposing a separate corporate entity wherein the government's stake can be transferred and divested over a period of time. Further, the survey has said privatised entities have performed better than their peers in terms of net worth, profit, return on equity and sales, among others. The survey analysed the data of 11 PSUs that had been divested from 1999-2000 and 2003-04 and compared the data with their peers in the same industry. "More importantly, the ROA and net profit margin turned around from negative to positive, surpassing that of peer firms, which indicates that privatised CPSEs have been able to generate more wealth from the same resources... The analysis clearly affirms privatisation unlocks the potential of CPSEs to create wealth," it added. Interestingly, according to the government document, the recent approval of strategic disinvestment in Bharat Petroleum Corporation Limited (BPCL) led to an increase in value of shareholders' equity of BPCL by ₹33,000 crore compared to its peer Hindustan Petroleum Corporation Limited. "Aggressive disinvestment, preferably through the route of strategic sale, should be utilised to bring in higher profitability, promote efficiency, increase competitiveness and to promote professionalism in management in CPSEs," stated the Survey. "The focus of the strategic disinvestment needs to be to exit from non-strategic business and directed towards

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optimising economic potential of these CPSEs," it added, highlighting there were about 264 CPSEs under 38 Ministries or departments.

## Bigger Banks Needed For \$5 Trillion Economy

The country will need much bigger banks to become a \$5 trillion economy, the Economic Survey 2019-20 said. In particular, at least eight banks are needed which are large enough to belong to the top 100 banks globally, the Survey said noting there is now only one bank in the country, the State Bank of India, with 55<sup>th</sup> rank, in the world's top 100 banks.

#### Lag in Performance

Observing that even though public sector banks are the dominant players in the banking sector, they lag considerably in performance metrics when compared to their peers, the Survey said, pointing out that these entities have destroyed capital deployed by the government over the years. "In 2019, every rupee of taxpayer money invested in public sector banks, on average, lost 23 paise. In contrast, every rupee of investor money invested in 'New Private Banks' (NPBs) — banks licensed after India's 1991 liberalization — on average gained 9.6 paise," it noted. The report highlighted that while a large economy needs an efficient banking sector to support its growth, credit growth among PSBs has declined significantly since 2013 and has also been anaemic since 2016. Credit growth for the new private banks, however, remained healthy. Commenting that anaemic credit growth has impacted economic growth, the Survey called for enhancing the efficiency of public sector banks as they operate in the same market as the new private sector banks.

## Less Operating Freedom

The report says the decline in PSB market share has been largely absorbed by new private banks. The report also pointed out that the PSBs enjoy less strategic and operating freedom as compared to private banks. It says the majority ownership by the government also subjects public sector bank officers to scrutiny of their decisions by the Central Vigilance Commission and the Comptroller and Auditor General.

#### Wary of Risks

"With no real restrictions on what can be investigated and under what circumstances, officers of state-run banks are wary of taking risks in lending or in renegotiating bad debt, due to fears of harassment under the veil of vigilance investigations," the Economic Survey added.

## Thalinomics: The Formula Behind One Square Meal

→ For the average worker in India's organised manufacturing sector, the affordability of a plate of vegetarian food — comprising rice or roti, dal and sabzi — has improved 29% since 2006-07, according to Thalinomics, a take on the economics of food by the Economic Survey. For non-vegetarians, affordability has risen 18%. However, accelerating food inflation over the last few months has broken that trend, with workers now forced to use an increasing share of their wages on food, the data compiled in the survey shows. The thali prices include the costs of raw cereals, vegetables, and protein, as well as the spices, condiments, cooking oil and fuel needed to prepare the meal. While Chief Economic Adviser Krishnamurthy Subramanian pitched Thalinomics as "economics for the common man", the fine print shows

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that the affordability factor was calculated using daily wages derived from the Annual Survey of Industries. This deals with workers engaged in the organised manufacturing sector, who form only 28% of the total manufacturing workforce. It excludes workers from the unorganised sector, as well as rural and agricultural workers. "While it is true that there was a decline in food prices during most of the period since 2015-16, this is also a period of stagnant or declining rural wages and highest unemployment," said Dipa Sinha, a member of the economics faculty at Ambedkar University and food security expert. "So where are the incomes for people to buy food? Low inflation is meaningless when real wages falling in rural areas means that the poor are not able to consume more." The Survey found that a worker who would have spent 70% of their daily wage on two vegetarian thalis a day for a household of five in 2006-07 would only have to spend 50% of their income for the meals in 2019-20. This year, the most affordable meal was in Jharkhand, where two vegetarian thalis for a household of five required about 25% of a worker's daily wage. The Survey said there was a "shift in the dynamics of thali prices" from 2015-16.

## For the Rural Poor, A Manufactured Crisis (Rajendran Narayanan - Teacher at Azim Premji University)

The National Population Register (NPR) and a possible National Register of Citizens (NRC), which will unleash a humanitarian crisis, are being pushed at a time when rural distress is acute. With the Budget due soon, let's look at how the BJP-led government has served the interests of the rural poor.

#### A Grim Picture

The Consumer Expenditure Survey (CES) is meant to be conducted once every five years by the National Statistical Office (NSO). The CES contains details about the spending patterns of households. Data collected from this becomes a vital source of information to improve economic planning and budgetary allocation. However, the Central government suppressed the release of the most recent survey data from 2017-2018. According to the report, leaked to and published by Business Standard, consumer spending fell for the first time in 40 years. A remarkable analysis of the report by Professor S. Subramanian in 'The India Forum' compares the Monthly Per Capita Consumption Expenditure (MPCE) from the CES 2011-2012 and 2017-2018. It presents a grim picture of rural India. According to his article, if we rank the rur<mark>al popul</mark>ation from the poorest to the richest, and divide them into 10 groups (or deciles), we find that the MPCE fell for every group. This means that consumption — and so income — in the entire cross-section of the rural society decreased. For example, the average monthly consumption levels of the poorest 50% of the rural population was ₹1,138 in 2011-2012. This came down to ₹1,082 in 2017-2018. Overall, the average monthly household consumption reduced from ₹1,430 in 2011-12 to ₹1,304 in 2017-18, a sharp decline of around 9%. In other words, more people have become poorer and hence have less money to spend. Observing such inconvenient truths, the government tried to shun the survey results citing "data quality issues". This tendency to move from transparency to opacity when confronted with uncomfortable facts is not new. The government had kept delaying the release of the 2017-2018 Periodic Labour Force Survey (PLFS) data. In January 2019, the PLFS data was leaked, revealing that unemployment under the BJP-led government had reached a 45-year high. The government responded that the leaked report was "a draft report" and didn't release the data until after the general election results were announced. The truth, however,

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didn't change. Years of struggle for transparency is routinely being undermined. Such systemic crushing of data corrodes institutional values and the political economy. Recent NSO reports suggest that Consumer Food Price Index inflation increased from 2.99% in August 2019 to more than 14% in December 2019. The sharpest rise was noted in vegetable prices (more than 60%) while the price of pulses spiked by more than 15%. While the rise in prices might benefit some farmers, and the vegetable price rise might be seasonal, how will it impact the landless and small farmers? As per these reports, considering a family of four, even for the richest 5% of the rural population, the expenditure on cereals and pulses is less than ₹2.50 per day per person. For the poorer sections, the ability to spend is around ₹1 per day per person. To put this in perspective, the cost of one egg is ₹5 and one litre of milk is ₹30. As per the 2011 Socio-Economic Caste Census, 56% of the households don't own land and around 51% of the households depend on casual manual labour for income. For this segment, the MGNREGA can serve as a lifeline. However, in the last five years, the budgetary allocation for MGNREGA has been abysmal. One-sixth of each year's allocation are pending wage payments from previous years. Payments of most States haven't been released by the Central government since October. Continued delays in wage payments, in violation of Supreme Court orders, and low wage rates discourage workers from taking up MGNREGA work. Indeed, the twin evils of low incomes and high food prices means that the landless poor have to further reduce their food consumption. This might have consequences of low nutrition leading to lower physical and mental growth. Accounting for work demand, pending payments and inflation, any allocation for MGNREGA less than ₹1 lakh crore would be insufficient.

## Wrong Focus

It is distressing that instead of focusing on increasing rural wages and improving the functioning and payments of MGNREGA, the BJP-led government is wasting resources on divisive policies such as the Citizenship (Amendment) Act and National Population Register (NPR). The estimated cost of the NPR is ₹4,000 crore, an amount that can support 2.2 crore landless labourers through MGNREGA for 100 days at current wage rates. Further, since the arbitrary dilution of Article 370, according to reports of the Kashmir Chamber of Commerce, Kashmir Valley has incurred losses of around ₹18,000 crore, and about 5 lakh people have lost their jobs since August 5. The losses would be amplified if Jammu and Ladakh are added to this calculation. More than 4 lakh migrant labourers from parts of India, mostly from Bihar and Uttar Pradesh, were made to leave Kashmir Valley on August 5 rendering them jobless overnight. Add to these the costs of running detention centres for those categorised as 'stateless', and we are staring at a manufactured crisis of epic proportions. Women, in particular, would pay a huge price as they relocate after marriage and hence don't have relevant documents. When the Central government can't get cash, transfers correct for rural women under the PM Matru Vandana Yojana programme, owing to variation in documents, implementing NPR-NRC would be a monumental catastrophe.

## **A Mindset Problem**

→ It needs no reiteration that the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has acted as insurance for landless labourers during crop failures, agrarian crises and periods of a stressed economy. With the ongoing economic slowdown resulting in depressed rural wages and the lack of adequate opportunity to work, the

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MGNREGS has provided much needed succour and this explains why demand for it has peaked in the last few months across various parts of the country. The report that 15 States have already overshot budgets for the scheme's implementation and many have not been able to pay wage dues should be a cause for concern. Compounding the situation is the fact that the Centre is on the verge of running out of funds. This problem was not unexpected. While in absolute terms, the allocations for the scheme in the budget presented in July 2019 were higher compared to the previous financial year, the outlay fell in relative terms as a percentage of the overall allocations. The outlay was also lower than the actual expenditure in the previous year, which indicated the importance of the scheme in arresting rural distress. MGNREGS has been in place for more than a decade. The present Central government's approach has been to treat it as a secondary scheme that cannot be done away with. Several studies have pointed to its effect on the lives of the rural poor by providing employment in the agricultural off-season, offering alternative jobs during years of lean agricultural growth and as a safety net during crop failures. Researchers have also found that a large proportion of those availing the scheme are from the 18-30 age group, which suggests that this has addressed the problem of youth unemployment, which according to official statistics has peaked in recent years. Besides, other studies have also shown that MGNREGS has improved agricultural productivity where it has been implemented properly. The scheme, by now, should have been an ideal vehicle for rural development and not just a fallback option. It could also involve rural workers in skilled work and pay them more wages for asset creation beyond just roads, wells and check-dams. A change in mindset is therefore key in not just tiding over problems such as funding and wage-delays, but also in using them as an opportunity to address the slowdown. Economists have pointed to a slowing of rural consumption, which has also dragged down the economy. By paying wages adequately, and on time, to rural workers, the government could allow for more spending and consumption and stimulate the economy. A more meaningful allocation for the scheme in the budget is therefore a much-needed imperative.

## Examining the Slowdown (Sthanu R. Nair)

Setting aside the gloomy projections based on short-term economic trends, what does long-term and comparative evidence reveal about the health of the Indian economy? After the 1991 economic reforms, the Indian economy reached a higher growth plateau of 7% compared to a prior rate of 3.85%. India witnessed a high growth momentum during 2003-04 and 2010-11 with a period average of 8.45% (GDP with base 2004-05) or 7% (base 2011-12). The momentum lost steam in 2011-12 and 2012-13, gradually picked up again gradually to reach the 8% mark in 2015-16, and then started falling consistently to reach 6.63% in 2018-19. This trend suggests that India's current growth challenge has a structural dimension as it began in 2011-12. Despite these fluctuations from 2011-12, on average, India clocked a growth rate of 7.07% from 2011 to 2019, a decent figure compared to China's and the world's economic growth rates. Whereas, like India, the growth of the world economy was fluctuating since 2011, China's growth declined consistently from 10.64% in 2010 to 6.60% in 2018.

## Household Investment

Why couldn't India's growth momentum be sustained after 2010-11? To answer this, an indepth analysis of trends in five key macroeconomic variables — consumption, investment,

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savings, exports, and net foreign direct investment (NFDI) inflows — was done for two different periods: 2003-04 to 2010-11 and 2011-12 to 2018-19. The results reveal that compared to 2003-2011, investment and savings rates and exports-GDP ratio declined in the 2011-2019 period. The investment rate declined from 34.31% of GDP in 2011-12 to 29.30% in 2018-19, caused mainly by the household sector and to some extent by the public sector, but not the corporate sector. The slump in the domestic investment rate in the 2011-2019 period was compensated by increased NFDI inflows. On average, NFDI inflow was 1.31% of GDP during 2011-2019 compared to 0.89% during 2003-2011. The decline in household sector investment justifies the package of measures introduced by the Central government to revive the housing sector. The questionable policy, however, is the steep cut in the corporate income tax rate from 30% to 22%, aimed at boosting private investment. Given that the corporate investment rate has not eroded severely during 2011-2019, one wonders if the tax cut would help economic revival. A part of the largesse offered to Corporate India could have been used to spur rural consumption.

#### Savings and Consumption

The savings rate declined almost consistently from 34.27% of GDP to 30.51% between 2011 and 2018. This was also caused by a significant fall in the savings of the household sector in financial assets. Corporate savings did not fall. The fall in household financial savings is alarming and needs to be arrested. Savings are required to meet the requirements of those who want to borrow for their investment needs. Lower household savings imply lesser funds available in the domestic market for investment spending. The decline in household savings has pushed up private final consumption expenditure consistently from 56.21% of GDP in 2011-12 to 59.39% in 2018-19. This suggests that economic growth during 2011-2019 was powered by consumption, not investment. In contrast, during 2003-2011, growth was powered by investments. Thus, the popular view that economic slowdown was caused due to a slowdown in consumption demand needs to be re-examined. There is no concrete evidence to suggest that the economy is facing a structural consumption slowdown. India's exports-GDP ratio declined from 24.54% to 19.74% during 2011-2019. The decline started from 2014-15, coinciding with a similar trend in the world export-GDP ratio. However, the drop in India's exports was significantly larger than the world, a cause for concern. The exports- and NFDI-GDP ratio has deteriorated sharply and consistently in China after 2006. This, together with the consistent fall in China's GDP growth after 2010, proves that the Indian economy is doing better than China.

# Why 'Make in India' Has Failed (M. Suresh Babu - Teacher of Economics at IIT Madras)

→ On September 25, 2014, the Indian government announced the 'Make in India' initiative to encourage manufacturing in India and galvanise the economy with dedicated investments in manufacturing and services. Immediately after the launch, investment commitments worth crores were announced. In 2015, India emerged as the top destination for foreign direct investment, surpassing the U.S. and China. In line with the national programme, States too launched their own initiatives. Five years later, as we brace for another Union Budget, it would be appropriate to take stock of the much-hyped initiative as the economy in general, and the manufacturing sector in particular, is on a slippery slope. The 'Make in India' idea is not new. Factory production has a long history in the country. This initiative, however, set an

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ambitious goal of making India a global manufacturing hub. To achieve this goal, targets were identified and policies outlined. The three major objectives were:

- a) to increase the manufacturing sector's growth rate to 12-14% per annum in order to increase the sector's share in the economy;
- b) to create 100 million additional manufacturing jobs in the economy by 2022; and
- c) to ensure that the manufacturing sector's contribution to GDP is increased to 25% by 2022 (revised to 2025) from the current 16%.

The policy approach was to create a conducive environment for investments, develop modern and efficient infrastructure, and open up new sectors for foreign capital.

#### Designed to Fail?

Given that big-ticket projects for grand initiatives such as 'Make in India' have long gestation periods and lag effects, assessments of such initiatives can be premature. Also, governments often use the excuse of inheriting an economy riddled with macroeconomic problems, and demand more time to set things right. This is an argument that the current government invokes frequently. However, five years is a reasonable time period to assess the direction and magnitude of outcomes. As the policy changes were intended to usher growth in three key variables of the manufacturing sector — investments, output, and employment growth — an examination of these will help us gauge the success of the policy. The last five years witnessed slow growth of investment in the economy. This is more so when we consider capital investments in the manufacturing sector. Gross fixed capital formation of the private sector, a measure of aggregate investment, declined to 28.6% of GDP in 2017-18 from 31.3% in 2013-14 (Economic Survey 2018-19). Interestingly, though the public sector's share remained more or less the same during this period, the private sector's share declined from 24.2% to 21.5%. Part of this problem can be attributed to the decline in the savings rate in the economy. Household savings have declined, while the private corporate sector's savings have increased. Thus, we find a scenario where the private sector's savings have increased, but investments have decreased, despite policy measures to provide a good investment climate. With regard to output growth, we find that the monthly index of industrial production pertaining to manufacturing has registered double-digit growth rates only on two occasions during the period April 2012 to November 2019. In fact, data show that for a majority of the months, it was 3% or below and even negative for some months. Needless to say, negative growth implies contraction of the sector. Thus, we are clearly waiting for growth to arrive. Regarding employment growth, we have witnessed questions being raised over the government's delay in releasing data as well as its attempts to revise existing data collection mechanisms. The crux of the debate has been that employment, especially industrial employment, has not grown to keep pace with the rate of new entries into the labour market. Thus, on all three counts, 'Make in India' has failed.

There are three reasons. First, it set out too ambitious growth rates for the manufacturing sector to achieve. An annual growth rate of 12-14% is well beyond the capacity of the industrial sector. Historically India has not achieved it and to expect to build capabilities for such a quantum jump is perhaps an enormous overestimation of the implementation capacity of the government. Second, the initiative brought in too many sectors into its fold. This led to a loss of policy focus. Further, it was seen as a policy devoid of any understanding of the comparative advantages of the domestic economy. Third, given the uncertainties of the global economy and ever-rising trade protectionism, the initiative was spectacularly ill-timed. 'Make in India' is a policy initiative with inbuilt inconsistencies. The bundle of

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contradictions unfold when we examine the incongruity of 'swadeshi' products being made with foreign capital. This has led to a scenario where there is a quantum jump in the 'ease of doing business' ranking, but investments are still to arrive. The economy needs much more than policy window dressing for increasing manufacturing activity. The government must realise that industrialisation cannot be kick-started by a series of bills in Parliament and hosting investors' meets.

## Equity's Weak Pulse and Commodified Medicine (Dr. Soham D. Bhaduri - Mumbai-Based Doctor)

→ The current squabble over the Prime Minister's recent purported remark about pharmaceutical companies bribing doctors with women escorts trivialises the deep systemic moorings of medical malpractices which lie in these trends.

#### Advent of The Private Sector

As early as in 1938, only 23% of doctors were in the public sector with the rest working in the private sector, predominantly in single practices. Post-Independence, perpetual sub-optimal investments in public health allowed the private sector to capitalise, flourish, and increasingly gain the confidence of the masses. The private sector went from having about 1,400 enterprises in 1950 to more than 10 lakhs in 2010-11. To doctors, this promised greater professional liberty, lesser restrictions, and higher incomes. After liberalisation, the greater focus shifted to the lucrative tertiary-care sector and led to an onslaught of sophisticated private health care in cities. The dominance of the market, bespoken by the simple fact that the private sector has over 70% of the health-care workforce and 80% of allopathic doctors, has meant that it is scarcely possible for a health-care provider to function in defiance of its norms. And the pervasiveness of malpractices in this market has come to ensure that few could survive without condoning them. Quite amazingly, players in this market, in much of their malpractices, have also learnt to function as a harmonious family. The family plays its role in safeguarding its members, acquainting them with its norms and interests, and leveraging the power of its patriarchs to defend its interests in society. It is little wonder that the market has also come to dictate the avenues of aggrandisement and yardsticks of professional success for health-care professionals. Business finesse and social adroitness rather than clinical excellence and empathy become the touchstones of calibre in this market. Another way of describing things is that the larger chunk of Indian health care (and health workforce) could not be brought under a "national system" having some form of overarching state control or involvement — which could avail of essential health care without most people having to rely on a vagarious market, except as a luxury. The National Health Service of the United Kingdom, despite having seen a number of pro-market reforms over the years, remains the single largest health-care provider, employs nearly the entire health-care workforce, and makes essential health care available to all practically free at the point of service. What this ensures is that the profit-driven private sector, the minor component, caters mainly to the affluent lot as largely a matter of deliberate choice rather than desperate compulsion. The Indian example, much like the United States', bespeaks the failure of the idea that a free market will compel players to be more efficient. Rather than increasing efficiency, the players have found it expedient to scrupulously exploit the prevailing cracks in the system and employ devious methods in order to maximise profits.

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## Two Systems

Health-care providers, just like others, are moulded by their social surroundings. When necessary controls are loosened, the connatural vices are let loose; when the habitat is conducive to values, the right traits develop. A system that starts off with health care as an overt tradeable commodity queers the pitch for virtues. Over time, a culture of exploitation and profiteering gets cemented, and the system gets locked in a trajectory that becomes difficult to alter. It is little wonder that in such systems, doctors require hefty incentives to stay motivated. Also, the medical profession attracts more of those with an ambition to earn riches than ones with an aptitude for medical service, thus leading to a generation of doctors who become the apologists of a profiteering system. On the other hand, a system founded on the concept of equity (which, while remunerating doctors well, is able to separate incomes from patient care decisions by and large) cultivates a totally different culture of patient care. Doctors manufactured under its aegis cherish a spirit of service and hanker less for extravagant incentives. Things such as professional satisfaction and success come to be measured by a different yardstick, and there exists a different kind of motivation towards work, which is then bequeathed to the forthcoming generation.

# Time to Prioritise Education and Health (Muchkund Dubey - Former Foreign Secretary and Currently President, Council for Social Development)

In recent months, the government's macroeconomic policy has acquired a new salience in the context of reversing the current slowdown. The policy currently being pursued is intended primarily to incentivise potential investors by facilitating ease-of-doing-business and making large-scale concessions to the corporate sector. In this context, the government is taking credit for the relatively higher, though by no means spectacular, flow of foreign private capital and the progress of India in the ease-of-doing-business rankings. Further, tax concessions given to the corporate sector in the last budget are estimated at more than ₹1.40 lakh crore. Besides these, the remaining limitations on foreign investment are being relaxed or removed. In the process, the conditions laid down for these investments to serve social objectives and help in indigenisation are being jettisoned. But in spite of these measures, and amidst the absence of demand, there is little evidence of any significant increase in investment by the private sector.

#### Call for More Liberalisation

However, economists who are in favour of the above development strategy would like the government to go further and implement other items on their reform agenda, such as labour market liberalisation and removal of constraints on acquisition of land for industrial purposes. These economists brush aside the negative impact such reform measures are likely to have on the incomes, living conditions and the economic security of the workers and the agricultural class. Moreover, the policy of freedom of hiring and firing of labour will be counterproductive as it would squeeze demand further in a situation of huge demand deficit. Some of the economists in the above category are also advocating acceleration of investment in infrastructure. No sensible person will oppose additional efforts to build infrastructure which continues to remain awfully deficient in our country. But, while talking about infrastructure, these economists mean only physical infrastructure and that too only large projects in the field of transport and energy. They hold no brief for investment in human infrastructure, particularly in education and health. Besides, we must remember that

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investment in physical infrastructure is not as labour-intensive as that in other sectors and that large-scale projects in this field have long gestation periods.

#### Social Sectors and Demand

Abhijit Banerjee, a co-winner of the Nobel Prize in Economics, has been one of the few economists making a case for transferring income to the poor who are likely to spend the additional income to buy goods and services, an enhanced production of which offers the best chance for reversing the current slowdown. In this connection, he has singled out the mechanisms of the Mahatma Gandhi National Rural Employment Guarantee Act and direct income transfers. But even he has not mentioned the potential of investment in social sectors for creating demand in the short run by way of opening avenues for large-scale employment, and imparting competitiveness and sustainability to the Indian economy in the medium and long run. It is widely recognised that the social sectors in India are grossly underfunded. No mainstream economist or policymaker has come out with a suggestion for enhancing expenditures in these sectors. On the contrary, they have made expenditure in social sectors conditional upon higher rate of growth. Most mainstream economists and policymakers also believe that public expenditure in social sectors can only have a long-term impact on growth, and what is now needed is macroeconomic policies which can have immediate or very shortterm impact. This belief is deeply flawed, as it can be demonstrated that increased public expenditure in social sectors in the magnitudes required for meeting the constitutionally mandated objectives can have short- and medium-term effect of enhancing employment, generating demand and attracting investment.

## RTE And Teacher Employment

Let us take the example of the impact of investment in school education on employment and, hence, demand creation. The Right to Education Act (RTE) sets out the objective of universalising elementary education in five years. The National Education Policy, 2020 states that the Act "will be reviewed... to ensure that all students... shall have free and compulsory access to high quality and equitable schooling from early childhood education (age three onwards) through higher education (i.e. until Grade 12)". We, at the Council for Social Development, have calculated the magnitude of demand creation by meeting just one condition for realising this objective, i.e. employment of teachers. We have arrived at a figure of 5.7 million teachers by taking as the base the total number of children going to school from the 2011 Census; adjusting it appropriately for rate of growth in population since then; dividing these numbers by the pupil-teacher ratios fixed for each level of schooling; and deducting from it the number of teachers currently employed, obtained from the Unified District Information System for Education data. (As there is no fixed pupil-teacher ratio for children in the 3-6 years age group, we have assumed a ratio of 10:1). The recruitment of 5.7 million additional teachers over a period of, say, five years, can create huge scale demand. And, this is only one factor essential for universalising quality school education. There is also a large gap between requirement of infrastructure in the schools and that available and built recently. According to government data, only 12.5% of the schools covered by the RTE Act were compliant with RTE norms, most of which are related to infrastructure. Meeting these norms has the potential of creating employment on a large scale.

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## **Education and Employability**

Similarly, in the health field, there is a vast number of vacant posts for professionals at these levels. There is a huge deficit of paramedical workers, middle-level health workers, nurses and trained doctors. This is evident from the long queues of patients in the ill-equipped and inadequate primary health centres and government hospitals. The fact that health and education are of instrumental value in driving growth, creating employment and improving people's well-being is widely recognised but often forgotten when it comes to making investment in these sectors. Education has a crucial role to play for an individual in gaining employment and retaining employability. If we compare 2011 and 2017 data released by the Labour Ministry, the gap in educational attainment emerges as the single most important factor separating the gainers from the losers of the higher rate of growth during this period. Health and education have been widely recognised as public goods. In most developed and several developing countries, these services are either provided or are heavily subsidised by the state. Unfortunately, in India, we find the opposite trend of the state withdrawing from the provision of these services and consequently their rapid privatisation. In fact, the government has a well-entrenched policy of encouraging privatisation in both health and education. But, privatisation in these sectors has not led to efficiency or improvement of quality. It has only destroyed public sector institutions, promoted greater inequality and pushed the poor out. The gestation period of projects in social sectors is not as long as it is made out to be. After all, in the RTE Act, a gestation period of only five years was envisaged for universalisation of elementary education. It is therefore time for reprioritising education and health in the scheme of development strategy and the allocation of budgetary resources.

## Maharaja on Sale

Almost two years since the first attempt which failed to enthuse buyers, Air India is back on sale. Call it the government's desperation to exit the troubled airline that is devouring taxpayer money or call it smart learning from the last failed attempt, but the terms this time are exceptionally favourable and clearly appear to be tailored based on feedback from prospective buyers. As per the document inviting Expression of Interest (EOI), the government will sell 100% equity in the national carrier and Air India Express Ltd. and its 50% holding in AISATS, the joint venture with SATS Ltd., Singapore; the debt that the buyer will assume has been whittled down to ₹23,286.50 crore to match the written down value of its assets; the net worth of prospective bidders is reduced to ₹3,500 crore and bidding consortium members can have as low a stake as 10% only. It almost appears as if the terms are designed with specific bidders in mind. But there is one catch. The government has not addressed a prime hurdle to the stake sale — the fate of 17,984 employees of Air India and Air India Express, 9,617 of whom are permanent. Of the three troublesome factors that put off bidders the last time round — the government's insistence on holding a 24% stake in the airline post-privatisation, the large debt that it was expecting the buyer to assume and employee issues — the first two have been addressed but not the last one. Apart from the huge employee base, the successful bidder will also have to deal with pension liability for the airline's retired employees and their perks such as free/rebated tickets. All that the EOI document says is that contingent liabilities due to retired employees will be clarified at the Request for Proposal stage. If there is one weak spot on which the sale attempt could falter it is this. There is no escaping the fact that whoever buys the airline will have to shed surplus labour. A turnaround will not be possible without pruning employee costs. Maybe the

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government is hoping to negotiate with short-listed bidders on this sensitive issue that could have the airline's unions up in arms. Yet, lack of upfront clarity on this may put off prospective bidders. The government ought to have gone the whole hog and clearly stated its intent. Maybe a moratorium for a specified period on forced attrition could have been spelt out. This would have helped bidders make up their minds. There has been criticism that a "nationalist" government is selling off the national airline. But such criticism has to take into account that precious taxpayer money has been washed down the drain trying to save the airline. A whopping ₹30,500 crore has been sunk into Air India since 2012 despite which it has been posting losses. The best way to save the airline, its jobs and the national exchequer is to sell it. And sell it on the best possible terms with minimum compromise on employee interests.

- → The new buyer will get a total of 146 aircraft, 56% of which are owned by the airline group, while the remaining are on lease. It will also benefit from as much as 50% of the international market share held by Indian airlines as well as the airline's 4,400 airport slots at airports in the country and 3,300 slots in 42 countries, which will be available at least for six months after the sale is complete. As many as 9,617 permanent employees, including pilots and cabin crew with deep technical and operational expertise, will be up for grabs along with the airline's brand as well as the famous "Maharaja" and "Flying swan" logos.
- The last date for submitting interest to the transaction advisor is March 17 and the outcome of this round will be known by March 31, following which qualified bidders will be given two months to submit financial bids. But the private player keen to buy Air India will also have to take on liabilities of ₹32,474 crore, which includes the airline's debt of ₹23,286 crore. The government will absorb ₹56,334 crore in liabilities, including ₹36,670 crore of debt.
- → Air India currently operates to 56 Indian cities and 42 international destinations. Several of Air India's international and domestic routes are profit-generating, while a number of them are loss-making or witness low load factors. This is a legacy problem that the airline comes with for the new promoter. Additionally, while the airline comes with 121 aircraft primed as domestic and international workhorses, 18 of them are grounded for lack of funds to make them airworthy. The new investor also gets hold of the ground-handling firm AI-SATS, which offers end-to-end ground handling services such as passenger and baggage handling, ramp handling, aircraft interior cleaning, load control and flight operations, and cargo handling services for general, perishable, trans-shipment, express courier and special cargo at Bengaluru, Delhi, Hyderabad, Mangaluru and Thiruvananthapuram airports. This would provide the investor with an ancillary services firm with captive use.

## How Will Consumers and Employees Be Impacted?

CONSUMERS: If and when Air India is taken over by a private entity or consortium, experts believe the first move could be pruning of operations to ensure the airline inches closer to profitability. This could cause Air India to cease operations on certain loss-making domestic and international routes — leading to a rise in fares. It is believed that Air India's continuous loss-making operations have skewed the market, wherein private companies have to play ball even when fares are artificially low. Cutting certain routes could also impact consumers in terms of the unique offerings by Air India, such as higher baggage allowance, etc.

<u>EMPLOYEES</u>: Air India's bloated staff strength was flagged by potential investors in the last disinvestment attempt. The airline has 17,984 employees, of which 9,617 are permanent staff. According to the preliminary information memorandum, 36% of the permanent staff will

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retire in the next five years. However, Air India's Chairman and Managing Director Ashwani Lohani insisted that the airline did not have any "excess staff". Whether the employees will be retained by the new investor is unclear. The government is expected to provide more clarity on conditions for retaining staff in the request-for-proposal stage, which will come after expressions of interest are received.

#### So, Will the Airline Be Finally Sold?

Despite the strong political will to privatise the airline, the government has received opposition even from within. BJP leader Subramanian Swamy tweeted on Monday: "This deal is wholly anti-national and I will (be) forced to go to court. We cannot sell our family silver." Employee unions have always opposed stake sale. However, the government has held extensive meetings with the unions, and tried to identify specific issues raised by them. A lot also depends on the global politico-economic scenario that enables bidders, from India or abroad, to show interest in acquiring the loss-making airline. Given that there are specific parts of the airline that are considered attractive for different entities, experts are of the view that if this second attempt too fails, the government will have no choice but to take a piecemeal approach at divesting the national carrier.

## After Zomato eats Uber

→ In 2017, when Uber Eats launched in India, commentators flagged its late entrance in the online food-delivery business dominated by Naspers-backed Swiggy and Alibaba-funded Zomato. Uber had reasoned then that entering a semi-mature market could possibly save it investments in developing an ecosystem in which people ordered food online. Less than three years later, Uber has sold its food-delivery operations to Zomato in an all-stock deal that gives it 9.99% ownership in Zomato.

## What Is India's Food-Delivery Market Like?

Swiggy and Zomato together command nearly 80% of India's online food-delivery market, with smaller players including Ola (which acquired Foodpanda), and various cloud kitchens occupying the rest. According to estimates, more than 3 million orders are delivered by online platforms every day — with a majority of orders being placed in the seven cities of Delhi, Mumbai, Bengaluru, Kolkata, Hyderabad, Pune, and Chennai. Both Zomato and Swiggy claim a presence in more than 500 cities across the country. Uber Eats was able to establish itself in 40 cities. Over the past year, both the big players have expanded aggressively to tier-II and tier-III towns on the back of a growing selection of restaurants, and increased preference for online food ordering. Over the past two years, Uber Eats too, while controlling just over 1% of the market, went into smaller cities such as Guwahati, Madurai, Kottayam, Udaipur, Kollam, and Mangaluru. The expansion, however, has come at a cost. Like other consumer tech sectors, food-tech too, is struggling with losses due to high spends on subsidising orders to acquire and retain customers. Both Zomato and Swiggy offer discounts and services like free delivery to retain customers on their platforms.

#### What Does the Deal Mean for Uber?

Since the company's disappointing public offering last year, it has been taking its hands-off loss-making businesses. In November last year, Uber CEO Dara Khosrowshahi had laid down the company's strategy for the food-delivery business — suggesting that it would operate

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only in markets where it was able to occupy the No. 1 or No. 2 spot. In line with this strategy, Uber has already pulled out its food-delivery business from the Vienna and South Korea markets. In fact, Uber had conceded to Zomato and Swiggy as early as in April last year. In filings with the US Securities and Exchange Commission prior to its public offering, Uber had said: "Our competitors in certain geographic markets enjoy substantial competitive advantages such as greater brand recognition, longer operating histories, larger marketing budgets, better localised knowledge, and more supportive regulatory regimes. "In India, for example, our Uber Eats offering competes with Swiggy and Zomato, each of which has substantial market-specific knowledge and established relationships with local restaurants, affording them significant product advantages. As a result, such competitors may be able to respond more quickly and effectively than us in such markets to new or changing opportunities, technologies, consumer preferences, regulations, or standards, which may render our products or offerings less attractive." According to industry estimates, Uber Eats' India business contributed less than 5% of the vertical's overall food-delivery bookings globally, but accounted for almost a fourth of the segment's global losses. Between August and December last year, Uber estimated a loss of \$107.5 million for its food-delivery business in India; the move to sell to Zomato is in line with the company's strategy of pruning lossmaking businesses. The deal gives Uber 9.99% ownership in Zomato, which according to the latest round of fundraising earlier this month, was valued at \$3 billion. Even though Zomato is loss-making as well, holding a stake in a growing company gives Uber the chance to recover at least a part of its investment in India at a later stage. Additionally, divestiture of Uber Eats would give Uber more room to invest in other growing businesses. In a statement, Khosrowshahi said Uber will continue to invest in its local Rides business, in which the company claims to be the category leader.

#### What Does the Deal Mean for Zomato?

Zomato has been in a neck and neck battle with Swiggy for the top position in India's online food-delivery business. Acquisition of Uber Eats barely strengthens Zomato's position in the segment, but it certainly gives it an advantage over its rival in terms of the customer data that it acquires from Uber. Also, the exit of a player from the market will give Zomato greater negotiating power with restaurants, which could translate into lesser cash burn and reduced losses going ahead. Zomato's purchase of Uber Eats also indirectly brings Softbank into India's food-tech space. Earlier, Softbank had been in talks with Swiggy for a significant investment, but it did not come to fruition.

## What Does It Means for Consumers and Restaurants?

As Swiggy and Zomato continue to expand into newer markets, discounts and subsidised offerings will be their go-to strategy to acquire consumers. Restaurants, which are already at loggerheads with Zomato over its Gold offering for dining out and delivery will, however, lose bargaining power in a duopolistic market. But unlike other sectors where a duopoly would effectively function like a monopoly, the online food-delivery segment is expected to be competitive even with two players, given that future valuations and fundraising for these companies would depend greatly on the numbers they are able to show to their investors. Finally, there is the question of Uber Eats' 100-odd employees, whom Zomato is unlikely to take over. Sources said some Uber Eats staff will be absorbed into Uber's other verticals, while the remaining will be laid off.





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## Life & Science

## What is Spitzer Space Telescope?

→ NASA's Spitzer Mission, which studied the universe in infrared light for more than 16 years, will come to an end since it is low on fuel and has been drifting away from Earth for a few years now. Engineers will decommission the Spitzer aircraft, after which it will cease to conduct science operations. The Spitzer Space Telescope is a space-borne observatory, one of the elements of NASA's Great Observatories that include the Hubble Space Telescope and the Chandra X-Ray. Using different infrared wavelengths, Spitzer was able to see and reveal features of the universe including objects that were too cold to emit visible light. Apart from enabling researchers to see distant cold objects, Spitzer could also see through large amounts of gas using infrared wavelengths to find objects that may otherwise have been invisible to human beings. These included exoplanets, brown dwarfs and cold matter found in the space between stars. Spitzer also studied some of the most distant galaxies ever detected. The light from these galaxies reached us after traveling for billions of years, enabling scientists "to see those objects as they were long, long ago". Hubble and Spitzer in 2016 identified and studied the most distant galaxy ever observed. Using these two telescopes, scientists were able to see a bright infant galaxy as it was over 13.4 billion years ago, roughly 400 million years after the Big Bang, when the universe was less than 5% of its current age. Spitzer was originally built to last for a minimum of 2.5 years, but it lasted in the "cold" phase for over 5.5 years. On May 15, 2009 the coolant was finally depleted and the "warm mission" began.

## Kangaroo Mother Care Improves Infant Survival

\*\*Name of the care (KMC) or the intervention where babies are placed in skin-to-skin contact with their mothers and exclusively breast fed has been recommended worldwide for stable low-birthweight new-borns. Stable babies are defined as babies who do not need respiratory support or intravenous fluids and can accept oral feeds. Though previous studies have shown that keeping the baby in contact with the mother improves survival in babies (less than 2 kg weight at birth) when compared to standard hospital care, global data show that barely 5% receive such care. Also, there is no much evidence on kangaroo mother care impact when initiated at homes in India. To understand this, a team of researchers led by Nita Bhandari, Director at the Centre for Health Research and Development, Society for Applied Studies, New Delhi, carried out a study in Haryana. The results recently published in The Lancet show that kangaroo mother care improved survival by 30% and 25%, in babies till 28 days and six months of age, respectively. The paper adds that such care for all infants with low birthweight could substantially reduce neonatal and infant mortality.

## **Developing Countries**

About 97% of the world's low-weight babies are born in developing countries, and India accounts for about 40% of this, implying an urgent need of effective interventions. Sarmila Mazumder, lead author of the study says, "In developing countries, even today, babies are born at home or even if born in hospitals, are discharged too soon without kangaroo mother care initiation. It is imperative therefore that such care is initiated at home." For the study, over 8,000 stable low-birthweight babies weighing less than 2.25 kg, were enrolled from two

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districts in Haryana, during 2015-2018 and randomly assigned to intervention and control groups. Kangaroo mother care intervention was initiated at home, at an average age of 33 hours and delivered during the first month of life, through home visits. The enrolled babies were followed up at one, three and six months of age.

## Multiple Benefits

Dr. Mazumder adds that kangaroo mother care benefits are much beyond preventing hypothermia. "The care improves exclusive breast feeding, duration of breast feeding, and also reduces infections. It also promotes growth and development of the child and increases mother child bonding, and also reduces stress in both mother and baby," she explains. When asked how long babies need to be kept in such care, Dr. Mazumder explained that in the study, mothers were advised to keep the babies as long as possible, preferably 24 hours in day and night and till 28 days of age. An average of 11 hours of skin-to-skin contact was achieved, and mothers reported giving kangaroo mother care till 27 days of baby's age. WHO recommends that it be continued till baby attains a weight of 2.5 kg or till babies wriggle out, indicating that they do not need kangaroo mother care any further. Dr. Mazumder added that an implementation research was also conducted by the same team with the Haryana Government to scale up kangaroo mother care across 16 districts of the state. The paper adds that kangaroo mother care has the potential to prevent thousands of neonatal deaths in our country if 90% coverage can be achieved.

## Step by Step, How Stress Turns Our Hair Grey

→ When hair turns grey with age, it is because the body has started to lose the pigments that give hair its colour. What was unclear so far, however, was why hair sometimes turn grey prematurely, and suddenly. This is called the Marie Antoinette Syndrome; the French queen's hair is said to have turned grey overnight at age 38, before her execution in 1793. Many people also have personal anecdotes of stress causing the sudden greying of hair. Now, science may have finally found out the reason why. In a new study in the journal Nature, Harvard University researchers describe the mechanism that causes greying under stress. In short: stress activates certain nerves, which permanently damages stem cells that generate pigments in hair follicles.

## The Experiments

Experimenting with mice, the researchers looked at and eliminated various possible reasons. One hypothesis was that stress causes an immune attack on pigment-producing cells, but the researchers found that mice without immune cells, too, showed hair greying. Experiments with the hormone cortisol, too, reached a dead end. The researchers eventually found the answer in the nerves that cause the "fight-or-flight response". This refers to the way the body reacts to a terrifying event or a threat. It is marked by the release of hormones that prepares the body to either face the situation or run away. The nerves that cause this response are called the sympathetic nerve system.

## So, What Happens?

The researchers found that stress causes sympathetic nerves to release a chemical called norepinephrine. This turned out to be the culprit. In the hair follicle, certain stem cells act as reservoirs of pigment-producing cells. When hair regenerates, some of the stem cells convert

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into pigment-producing cells. When stress causes sympathetic nerves to release *norepinephrine*, the researchers found that the chemical, in turn, causes the stem cells to activate excessively. All the stem cells then convert into pigment-producing cells, and this depletes the reservoir. "After just a few days, all of the pigment-regenerating stem cells were lost. Once they're gone, you can't regenerate pigments anymore. The damage is permanent," said senior author Ya-Chieh Hsu, stem cell and regenerative biologist at Harvard.

#### Mice and Humans

There are several reasons why scientists use mice for laboratory experiments. Mice are easy to house, easy to handle, and are often considered ideal for research with implications for humans, because they resemble humans closely in genetic and biological characteristics, and in behaviour. But how sure can one be that the human body will replicate the stress response mice showed leading to the greying of hair? "This is an area that needs more research," Hsu said by email, when asked this question. "While we are hopeful the relationship will be close, we do not have definitive evidence at this point. The reason we're hopeful the mechanisms are related is that both of these systems (pigment-producing stem cells and sympathetic nerve) are very similar in mice and humans," she said.

## The Bigger Picture

The researchers are hopeful that their findings can have wider implications. "Our study shows the impact of stress on stem cells— and we wonder if other stem cells in the body may be affected, too. This research is critical to helping scientists understand how stress affects stem cells in the body, and how stress affects different tissues. We hope our work will help other researchers look into this important but understudied area. Understanding how stress affects stem cells is essential to developing future interventions that are both safe and effective," Hsu said.

## African Cheetahs to Prowl Indian Forests

The Supreme Court lifted its seven-year stay on a proposal to introduce African cheetahs from Namibia into the Indian habitat on an experimental basis. The plan was to revive the Indian cheetah population. In May 2012, the top court had stalled the plan to initiate the foreign cheetahs into the Palpur Kuno sanctuary in Madhya Pradesh, fearing that they may come into conflict with a parallel and a much-delayed project to reintroduce lions into the same sanctuary. The court was also worried whether the African cheetahs would find the sanctuary a favourable clime as far as abundance of prey is concerned. However, a Bench led by Chief Justice Sharad A. Bobde was nudged by the National Tiger Conservation Authority (NTCA) to take the plunge and go ahead with its plans to bring the African cat to India. But the Bench made sure that the right precautions are taken. It set up a three-member committee, comprising former Director of Wildlife Institute of India Ranjit Singh, DG of Wildlife Institute of India Dhananjay Mohan, and DIG, Wildlife, Ministry of Environment and Forests, to 'quide' the NTCA. Chief Justice Bobde, speaking for the Bench, directed the committee to file a progress report every four months. The court made it clear that a proper survey should be done to identify the best possible habitat for the cheetahs. Every effort should be taken to ensure that they adapt to the Indian conditions. The committee would help, advise and monitor the NTCA on these issues. The action of the introduction of the

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animal would be left to the NTCA's discretion. Officials at the NTCA told The Hindu that the court order notwithstanding, the actual process of translocation might be long-drawn. The cheetah does not breed well in captivity and requires vast stretches of grassland, and access to adequate prey to thrive. "There are eight to nine identified sites in India but the best one is in the Kuno Palpur sanctuary. However, we still have to make it suitable for the cheetah," a source said. The purported gains from introducing the cheetah would include tourism, improvement of grasslands and global recognition for successfully reviving the animal in India. The hearing came on an application filed by the NTCA.

## **India Begins Coral Restoration**

→ The Zoological Survey of India (ZSI), with help from Gujarat's forest department, is attempting for the first time a process to restore coral reefs using biorock or mineral accretion technology. A biorock structure was installed one nautical mile off the Mithapur coast in the Gulf of Kachchh on January 19. Biorock is the name given to the substance formed by electro accumulation of minerals dissolved in seawater on steel structures that are lowered onto the seabed and are connected to a power source, in this case solar panels that float on the surface. "When a positively charged anode and negatively charged cathode are placed on the sea floor, with an electric current flowing between them, calcium ions combine with carbonate ions and adhere to the structure (cathode). This results in calcium carbonate formation. Coral larvae adhere to the CaCO3 and grow quickly," he added. Dr. Satyanarayana, a renowned coral expert, added that fragments of broken corals are tied to the biorock structure, where they are able to grow at least four to six times faster than their actual growth as they need not spend their energy in building their own calcium carbonate skeletons. Along with scientists from the ZSI, Thomas Goreau, President of Global Reef Technology, U.S.A. had also provided inputs to the restoration project. The location for installing the biorock had been chosen keeping in mind the high tidal amplitude in the Gulf of Kachchh. The low tide depth where the biorock has been installed is four metres, and at high tide it is about eight metres. Shyamal Tikadar, Principal Chief Conservator of Forests (PCCF) (Wildlife), Gujarat, said that the biorock structure had been lowered and that calcification had started, making it an academic success. "For us the real success will come when we find that the attached and new organisms (corals) grow faster and we are able to scale up the process," Mr. Tikadar said. He added that a final determination on whether the biorock structure was giving the desired results or not would be made in the next three months. Throwing light on the degradation of coral reefs across the world and also in India, Kailash Chandra, director of ZSI, said that threats were posed both by climate change induced acidification as well as by anthropogenic factors. Observing that coral reefs were the most diverse ecosystem on the earth, Dr. Chandra said India has four major coral reefs areas: Andaman and Nicobar Islands, Lakshadweep, Gulf of Mannar and the Gulf of Kachchh. In 2015, the same group of ZSI scientists with the support of the Gujarat forest department had successfully restored branching coral species (staghorn corals) belonging to the family Acroporidae (Acropora formosa, Acropora humilis, Montipora digitata) that had gone extinct about 10,000 years ago to the Gulf of Kachchh. The researchers claimed that the specimens for regenerating these corals were brought from the Gulf of Mannar with the help of Tamil Nadu's Forest Department. Dr. Satyanarayana said that the ongoing initiative of coral restoration using biorock technology could potentially help to sustain the earlier successes. He added that the technology helps corals, including the highly sensitive branching corals, to counter the threats posed by global warming.

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## Let's Face It

→ European media network EURACTIV and Politico published a story that said the European Commission is mulling a temporary ban (of up to five years) on the use of facial recognition technologies in public spaces. The story is based on a leaked draft paper being prepared by the Commission for publication in February. Two big tech companies — Alphabet and Microsoft — have taken completely different positions on the idea. Alphabet CEO Sundar Pichai is backing it while Microsoft President Brad Smith is not. This comes even as facial recognition technologies are being increasingly adopted by individuals, organisations, and governments.

## Why Does the European Commission Want A Temporary Ban on Facial Recognition Technologies in Public Spaces?

The reasons from the report referred to above are not fully known as the report is not out yet. But from earlier media reports, it can be inferred that the European Commission believes that indiscriminate use of facial recognition technologies is a privacy threat, and some regulations are needed so that this does not easily give way to surveillance. During the temporary ban period, "a sound methodology for assessing the impacts of this technology and possible risk management measures could be identified and developed," says the leaked Commission paper, as reported by EURACTIV.

## What Exactly Have Been the Reactions of Alphabet and Microsoft?

Mr. Pichai has been cited by Reuters as saying he thinks "it is important that governments and regulations tackle it sooner rather than later and give a framework for it." A moratorium, according to him, is needed because this technology can be used for nefarious purposes. Mr. Smith, has been quoted as saying: "I'm really reluctant to say let's stop people from using technology in a way that will reunite families when it can help them do it." He also said: "The second thing I would say is you don't ban it if you actually believe there is a reasonable alternative that will enable us to, say, address this problem with a scalpel instead of a meat cleaver."

## How Is Facial Recognition Used in Today's World? When Is It Problematic?

It is increasingly being used for everything: from unlocking your phone to validating your identity, from auto-tagging digital photos to finding missing persons, and from targeted advertising to law enforcement. China's reported use of facial recognition technologies for surveillance in Xinjiang is an example of when this becomes problematic. It also becomes problematic in the absence of privacy and data security laws.

## So, Is It Easy to Isolate Problematic Use Cases from Beneficial Ones?

Actually, it is based on a lot of factors. A blog post by tech major IBM categorises facial recognition systems into three. One, face detection, which could help count the number of people in traffic. Two, facial authentication, which could help you unlock your phone. Three, facial matching, which could help investigators quickly zero in on suspects. The use cases mentioned are in no way exhaustive. IBM says in the post: "Each of these technologies and their uses can raise specific questions and possible concerns, ranging from privacy and civil

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liberties to user security and safety. In considering whether and how best to regulate any technology — from nuclear power to the Internet — it is imperative to consider both the use and the ultimate end-user. Facial recognition systems are no different." So, it says, "Instead of simply banning an entire category of technologies with so many possible applications, including many that are helpful and benign, policymakers should employ precision regulation that applies restrictions and oversight to particular use-cases and end-users where there is greater risk of societal harm."

#### Is the Current Debate on Facial Recognition Part of a Larger Debate?

Yes, it flows from conversations all over the world and more specifically on both sides of the Atlantic on regulating artificial intelligence systems (advanced tech whose actions mimic those of humans). Such systems can write stories based on a database, drive cars (still being tested out), and automatically spot suspects in a crowd or for that matter spot anyone. The leaked report of the European Commission is not dealing with just facial recognition. Its mandate is to provide a framework for artificial intelligence. The U.S., on the other hand, has recently released guidelines regarding artificial intelligence, and they reportedly point to a light touch when it comes to regulation. Historically, Europe and the U.S. have had completely opposite approaches to regulation.

#### Meanwhile, What Is the World Doing with Facial Recognition Technologies?

In a few U.S. cities, including San Francisco, there is now a ban on the government's use of facial recognition technologies. But the list of adopters seems to be growing bigger by the day. London has joined the bandwagon, and will use real time facial recognition systems to police the city. Closer home, Telangana has recently tested this technology to verify voters in local elections.

## What Will Now Happen to The European Commission Report?

It is likely to be published by the end of February. And the whole of the remaining part of the year will be spent in getting feedback. A law is not likely this year.

## Should the Bezos 'Phone Hack' Be Cause for Alarm?

What Is A Buffer Overflow? How Does It Affect Whatsapp?

Buffer overflows allow attackers to read or write data outside of the defined memory boundaries of a particular programme. Though mitigative measures exist, buffer overflow vulnerabilities in general are complex, and are considered to be harder to detect and exploit than other, more frequently occurring security flaws. In some cases, buffer overflow vulnerabilities can be leveraged for executing malicious code on the target machine. A buffer overflow vulnerability in an application such as WhatsApp would allow an attacker to take advantage of the context under which the application is running on the system. Though a vulnerability in WhatsApp alone would not suffice for total compromise of the device, here, the protections offered by end-to-end encryption on the platform would be rendered ineffective — since end-to-end encryption only refers to message contents being encrypted while they are in transit — and since, with a buffer overflow, an attacker would be able to get access to the buffer where data (including received messages) is stored. By exploiting such

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a flaw, permissions that have been granted to the app, which may include permission to access the device's microphone, camera, location, gallery and more — also stand to be exploited, though protections baked into mobile operating systems may make this harder to achieve.

## Can A Buffer Overflow in Whatsapp Result in The Phone on Which It Is Being Run Being Compromised?

Modern computing devices, including smartphones, implement a number of security measures to effectively contain the extent of a program's ability to interact with machine it is running on. One such measure is known as a "sandbox", which limits the ability a program or process has to interact with operating system code. However, it is possible to bypass such protections, too. It is possible to "chain" a vulnerability in software such as WhatsApp — with a vulnerability in the device's operating system — escaping the sandbox within which it is run, to ultimately gain "root" privileges on the affected system. Exploitation of sandbox and kernel vulnerabilities is also what allows "jailbreaking" to be performed on devices. Root access on a device grants the attacker with the highest level of privilege that can be held on the system. This would allow the attacker to circumvent most (if not all) software restrictions imposed on the device. This level of access is also essential for deploying tools that can freely access or modify data on the device, alter core functionality, and more.

#### How Is Data Extracted from A Device?

Traditionally, upon infection, infected devices communicate back to a "command and control" server. Since a lot of the files on a device may be junk, or of meagre value, an operator would choose what kind of data they wish to retrieve. To thwart the possibility of detection via unusual spikes in bandwidth usage, an operator may choose to extract only information of vital importance. Further, since stealth is ideal, outbound data may be transmitted through alternative channels, make use of obfuscation or encryption, among other techniques, to prevent detection. Alternatively, an attacker with access to a device may choose not to extract information at all, instead choosing just to "view," this information by accessing it through an SSH tunnel.

#### **How Can Users Protect Themselves?**

A matter of relief is that vulnerabilities such as the ones that have been discussed above are not easy to come by. They are discovered as a result of continuous, concentrated efforts and arduous testing. Similarly, the people who discover these flaws have an active natural interest in retaining knowledge of just how the flaw works. Facilitators such as the NSO Group do not just relay information about their "proprietary" vulnerabilities to customers. They instead opt to perform the exploitation themselves, and thereby ensure that customers are not able to infect devices without having them in the loop. For most users, following basic security hygiene, such as not visiting untrusted websites, installing untrusted third-party applications or certificates, keeping device and application software updated, should be enough. People must remember that WhatsApp is not the only method of delivery for complex attacks. Vulnerabilities exist which can allow for escaping the sandbox of mobile browsers to execute code on the system. Though, it should be noted that highly specialised attacks, such as Pegasus, have not been known to "indiscriminately" target users. This is primarily because of the risk of detection that widespread exploitation would invite. Further,

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though no software update can eliminate entirely the prospect of future vulnerabilities being discovered, frequent updation may incapacitate certain exploits, that is due to the fact one vulnerability may not always work in conjunction with another. For those with an elevated threat profile, simply keeping your phone updated may not always be a definitive way of preventing attacks. Devices can be compromised in a variety of ways, especially given that the adversary has enough time and resources. Device security must be extended to include monitoring — not only superficial monitoring, which relies on known signatures and vulnerabilities — and not only that which occurs after an indicator of compromise has been spotted.

## Why Are There More Men Than Women in The Field Of STEM?

Across the world, there are more men who are active in science, technology, engineering and medicine (STEM) than women. What is the sociology behind this gender-divide? Research shows that when men and women apply for jobs — be in the labour market, or in places where high level qualifications are demanded, men candidates engage in self-promotion, and are boastful while equally qualified women are more 'modest' and 'undersell' themselves. Even in groups and situations where men and women are present as colleagues, the views of women are either ignored or listened to less seriously than those of men. As a result, women tend to underestimate their ability relative to men, especially in public settings, and negotiate less successfully. This last point has been particularly brought out in a detailed set of studies by Dr. Sapna Cheryan and colleagues of the University of Washington, Seattle, in their paper: 'why are some STEM fields more gender balanced than others?' They point out that in the United States while over 60% of BS, MS and PhD degrees in biological and chemical sciences are from women, only 25-30% of them do computer science, physics and engineering. Why this imbalance? The authors suggest three sociopsychological reasons, namely (1) masculine culture, (2) lack of sufficient early exposure to computers, physics and related areas compared to boys in early childhood and (3) gender gap in self-efficacy.

## Stereotypes and Role Models

What is 'masculine culture'? This is due to stereotyping that men are fitter for certain jobs and skills than women, and that women are more 'delicate', 'tender' and thus unfit for 'hard' jobs. In addition, there are not enough female role models whom women may admire and follow. (Of the 866 Nobel winners so far, only 53 have gone to women. And even in life sciences and medicine, of the over 400 Lasker awards, only 33 have gone to women). Regarding point 2, namely, lack of exposure in early childhood to certain fields, the supposed stereotyping of computer field practitioners as 'nerds' with social awkwardness would seem to have played a role from women shying away into other fields. The third point, namely, the 'gender gap in self-efficacy', appears to have arisen as a result of the above two, and leads to a worry in girls' and women's minds as to 'whether I am really only fit for certain 'soft' fields and jobs (such as in social sciences and life sciences)'— or a feeling of diffidence. This is clearly a reflection and product of masculine culture. But then, even when we turn to life sciences, where both men and women compete for positions and career advancements in universities and research labs, this gender disparity is glaring. Analysis has revealed that research-intensive universities take fewer women students. It has also been noted that many qualified women scientists have stopped applying for grants from the major national agency,

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the National Institutes of Health, realising that they may be turned down. 1,01,720 clinical research articles, plus 6.2 million papers in life sciences (appearing in PubMed) for the 15-year period 2002 to 2017, and found that women remain under-represented in the medical faculty and in life science research centres and universities. They also earn lower salaries, receive fewer research grants and fewer citations of their research papers than men colleagues.

#### India Is No Better

Men rule the roost here too, and how do they do it? They use more 'buzzwords', boosting their own work than women. A total of 25 such buzzwords are noted by the authors- some of the more frequent ones are: novel, unique, trendsetting, robust, and remarkable. In contrast, women are more modest and thus undersell themselves. Sadly enough, this boasting leads to more grants, leading to faster promotions, salary hikes, plus membership in decision-making committees. This self-perpetuation is a reflection of what Cheryan et al. had described as "machismo". India has been a patrilineal society with the notion that women need not take on jobs, and that this notion has only recently been revised. She points out that women form only 10-15% of STEM researchers and faculty members in the IITs, CSIR, AIIMS and PGIs. In private R & D labs, there are very few women scientists. Alas, we are no better that the rest of the world. The Bhatnagar Prize has gone to 18 women out of a total of 548 so far, and the Infosys Prize to 15 out of a total of 52. Interestingly, there are no (or a minute percentage of women experts) women in each of these juries.

#### **Corona Virus**

The Year of the Rat has begun on an inauspicious note for China. A new virus belonging to the Coronavirus family (now named novel coronavirus 2019-nCoV) has claimed over 200 lives in China and the numbers infected have touched 10,000 confirmed cases, as on Friday. The World Health Organization (WHO) has declared it a global emergency, as the outbreak continues to spread outside China. On January 25, China's President Xi Jinping convened a meeting of the top leadership to underline the seriousness of the outbreak. Chinese authorities have been directed to take whatever steps are needed on an emergency footing to deal with "a grave public health crisis". However, for Mr. Xi, it is more than a public health crisis; it is a credibility challenge, with both domestic and global dimensions.

## At the Epicentre

Ironically, the epicentre of the outbreak is the bustling town of Wuhan, China, which also hosts a number of biotech enterprises. Early on, many of the patients in Wuhan are reported to have had some link to a large seafood and animal market, suggesting animal-to-person spread. However, a growing number of patients reportedly have not had exposure to such markets, which shows that person-to-person spread is occurring. Normally, coronaviruses is a large family of viruses that are often the source of respiratory infections, including the common cold. Most of the viruses are common among animals and only a small number infect humans. Sometimes, an animal-based coronavirus mutates and successfully finds a human host. Rapid urbanisation that forces animals and humans into closer proximity (as in the "wet market" in Wuhan) creates a perfect petri dish from where such zoonotic outbreaks can originate. The first official acknowledgement of a new virus outbreak in Wuhan came on December 31 after an outbreak was confirmed. During the past four weeks, the number of

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those infected and fatal casualties have climbed rapidly. Cases have been reported from different parts of China as well as Hong Kong; cases/suspected cases have been reported from Thailand, Japan, Nepal, South Korea, Taiwan, Australia, the United States, France, Austria, Germany, Cambodia, Vietnam, Malaysia and Singapore. However, about 4,000 Chinese from Wuhan are reported to be still abroad. For India, the most critical is cases being reported in Nepal since India and Nepal share an open border though so far, all tests undertaken in India have been negative. A tweet by the Ministry of Health and Family Welfare on January 30 said that one positive case of a novel coronavirus patient — a student studying in Wuhan University, has been reported in Kerala. The patient, who is in isolation in a hospital, is stable and being closely monitored.

#### Decoding the New Virus

According to the World Health Organization, during previous outbreaks due to other coronavirus, human-to-human transmission occurred through droplets, contact and fomites (objects or materials which are likely to carry infection, such as clothes, utensils, and furniture), suggesting that the transmission mode of the 2019-nCoV can be identical. More significant is the new understanding that the virus is contagious even during incubation, that is even before a patient exhibits any symptoms. This characteristic amplifies transmissibility. It also explains the travel bans across China, and the literal isolation of Wuhan, a city of 11 million and the Hubei province with a population of nearly 60 million. For China, the timing of the outbreak could not be worse. The Chinese Lunar New Year began on January 24 and normally, it marks a week-long holiday, marked by feasting and travel by large numbers to join their families for the celebrations. Undoubtedly, this movement contributed to the rapid transmission of the disease across China and to many countries before the Chinese authorities cracked down. Hong Kong has drastically cut travel between the mainland and the city.

#### An Earlier Outbreak

Comparisons are being drawn the Severe Acute Respiratory Syndrome) outbreak in 2002-03 which infected around 8,000 patients and claimed nearly 800 lives. SARS is also a zoonotic case, part of the coronavirus family with clues pointing to horseshoe bats in China as the likely source. The first incidents were reported in Guangdong province in November 2002 but WHO was officially informed only after three months though mysterious flu outbreaks were being widely reported. It quickly became more than a public health issue and later, the Chinese health authorities issued a public apology. It was the first case of a coronavirus family virus developing lethal pathogenicity together with high transmission. The global economic loss was estimated at between \$30-\$100 billion. This time round, the Chinese government has been more open but the question being asked is whether it has been open enough? The response mechanisms, especially in the early days, evidently fell short, reflective of the 'top down' bureaucratic approach of the Chinese system. The system has kicked in now with the all-of-government approach which characterises the China model. This is embarrassing for the "core leader" Mr. Xi, the author of 'China's rejuvenation' who replaced Deng Xiaoping's advice of "hide your capability, bide your time" with the mantra "demonstrate capability, assume responsibility and claim rightful place", implying that China's time has come. How China manages this challenge will be a test, demonstrating that the Chinese model can deliver when it comes to a crunch and that it is a responsible global

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player, no longer hesitant about engaging with WHO. For SARS, it took 20 months from the genome sequencing to the first human vaccine trials; for the 2019-nCoV, authorities in the U.S. are working on a deadline of 90 days.

#### Lessons from Kerala

All this provides an interesting contrast with how the Kerala government dealt with the Nipah virus outbreak in May 2018. Nipah is also zoonotic and made the jump from fruit bats to humans. Though there were 17 deaths in India, effective quarantine measures by local authorities prevented the spread. It helped that health is a state subject. A local doctor took the initiative to contact the Manipal Centre for Viral Research which had worked in the northeast (where Nipah is more prevalent and a 2001 outbreak in Siliguri had claimed 49 lives) and had the diagnostic tools to identify the virus. The State health machinery responded with alacrity with many put under observation. No new case was reported after June and a month later, Kerala was declared Nipah-free and travel restrictions removed. Had the district and State authorities not taken the initiative and only reported matters to Delhi and awaited instructions while Delhi sent teams to prepare plans, the outbreak would have taken a higher toll. Kerala managed to curtail the Nipah outbreak with few casualties. However, infectious diseases including those of the zoonotic variety are on the rise in India. In addition, regions in India suffer from seasonal outbreaks of dengue, malaria and influenza strains. The nation-wide disease surveillance programme needs to be strengthened. There is an acute shortage of epidemiologists, microbiologists and entomologists which translates into wasteful delays in diagnostics. Given the growth potential of India's biotech sector, it is time to put in place a robust public-private partnership model that can transform the health services sector in the country, covering disease surveillance, diagnostic kit availability and accelerated vaccine development.

In July, 2008 newspapers began reporting about hundreds of children developing kidney stones and falling ill after consuming baby formula that was tainted with melamine. But the stories abruptly stopped. China was all set for the Beijing Olympics in August, and a reporter at the Southern Weekly, the first paper to break the scandal, later told that they had been told to stop reporting. The cover-up lasted two months. By the time the government finally lifted the lid on the scandal in September after the Olympics, more than 50,000 children had been hospitalised, and six died. The censorship, my friend believed, magnified the tragedy. These two stories came to mind this week, as the world watched China's response to the novel coronavirus outbreak. Beijing's all-out response has been praised by the World Health Organization for its scale. But not everyone in China is awestruck. As one veteran journalist wrote from Wuhan this week, the current top-down response was necessitated by many bottom-up failures. Writing under the pen-name Da Shiji for the China Media Project, he presented a remarkable account of how the outbreak was covered up and allowed to spread for close to 40 days, during which some 5 million people from Wuhan had left the city and many others had travelled there, unaware. Caixin, a bold Chinese media outlet, reported that the first infected patient was found on December 8. That month, police hauled up eight people for spreading "rumours" on pneumonia, after they had posted concerned messages online about patients with SARS-like symptoms in hospitals. It later emerged that those eight people were doctors. The new virus was confirmed on January 11. Up until January 17, Wuhan authorities maintained there was no need for concern. Incidentally, January 12 to 17 was when the province was holding its annual political congress, which precedes China's March national congress. During such political events in China, stability is the utmost priority. It was

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only when President Xi Jinping made his first comments on January 20 did the top-down machine kick into action. The government is sparing no effort to contain the spread. Openness is being encouraged, but Da Shiji thinks it will be temporary. "What will tomorrow bring," he asks. "Here in Wuhan, 11 million of us are waiting — not for dramatic action, but for openness and a real plan of action."

→ It must be noted that in 2017, the Ministry kept under wraps the detection of three cases of the Zika virus in Gujarat. These came to light when WHO was informed in May that year, more than five months after the first case was laboratory-confirmed; the excuse was that the government wanted to avoid creating "panic". Such irresponsible behaviour by China had led to the spread of the severe acute respiratory syndrome (SARS) virus that claimed 774 lives globally in the early 2000s. India should under no circumstances repeat this with the novel coronavirus as much is not known about the virus.

## Why Corona Virus Could Hit Indian Pharma Industry

Now that a case of infection by the novel coronavirus (2019-nCoV) has been flagged in India, central and state governments will be expected to try to ensure that its response system is strong, quick, and proactive in order to prevent the infection from spreading any further. The density of population in India, low levels of public awareness, and vulnerabilities in the healthcare network present strong challenges to controlling outbreaks of communicable disease. India is vulnerable also because it is heavily dependent on China for components used to make products across industries, including essential medicines. Its imports from China rose to \$76.38 billion in 2017-18 from \$60.41 billion in 2014-15 before dropping to \$70.32 billion in 2018-19, but there is still a large imbalance in trade between the two countries — India imports much more from China than it exports to it. Several products that India imports from other trading partners also have a heavy Chinese presence. For instance, a lot of the ASEAN region's value chains are dependent on China. The lockdown in China to control the outbreak has the potential to disrupt global supply chains of various essential products and consumer goods. If the situation does not improve soon, several industries in India and, ultimately, its citizens, could be impacted.

## Pharma Sector Key

According to government data, bulk drugs used to manufacture medicines were among the top 10 imports from China between 2015 and 2019. While an impact is expected across the board if the situation does not improve, experts feel pharmaceuticals may be among the sectors to be hit the hardest. China supplies nearly 70% of the total bulk drugs and intermediates (raw materials) imported to make medicines in India. Some 354 drugs and drug ingredients were imported from China in 2017. Experts said that supplies of fermentation-based ingredients used to make most antibiotics and vitamins would be the most impacted in case a shutdown of operations in China continues, or if the infection spreads to major manufacturing hubs. Major hubs for bulk drug exports are located far from Wuhan, but some industry executives said they were "closely" monitoring the situation as their imports from these hubs too have been impacted due to the extension of the Lunar New Year holidays. Most companies have enough stocks of these materials to last for 1-3 months, but there are "limited" alternatives in other countries for these ingredients to make antibiotics and vitamins. However, India has enough capacity to manufacture the raw materials for most other medicines.

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## Impact on Patients

Industry executives fear that if the situation does not improve soon, the cost of materials used to make medicines in India will rise regardless of therapeutic category. In the case of products that are under price control, the prices that customers pay should not be impacted. However, in the past, increasing prices of key therapeutic ingredients used to make drugs have led to shortages of the medicines in the country. On those earlier occasions, industry bodies had sought an increase in the maximum retail prices of these medicines, arguing that they were unable to recover the cost of manufacturing them.

## **A Troubling Prescription**

→ At a time when the novel coronavirus, 2019-nCoV, has spread to 20 countries/ regions, when the number of 2019-nCoV cases has risen to 7,711, and the number of deaths to 170 in mainland China alone, the Ministry of AYUSH has published a misleading advisory. In a press release circulated, the Ministry recommended certain Unani medicines for "symptomatic management of Corona Virus infection" and certain Ayurvedic practices and homeopathy medicines to help "prevent the infection". Nearly a month after China intimated the World Health Organization about 2019-nCoV, there is no drug to specifically target the virus. Nor is there any candidate drug that is at any stage of clinical trial to combat the virus. In the absence of specific drugs to treat the virus, patients are being provided with symptomatic treatment. They are being given enough oxygen so that they survive long enough for the immune system to fight the disease on its own. In such a scenario, not only is the Ministry's recommendation highly irresponsible and dangerous, but also runs counter to the Ministry of Health and Family Welfare's current practice of quickly isolating patients suspected of carrying the virus to prevent its spread, and providing them with symptomatic treatment if they are found infected.

## No Clinical Validation

None of the medicines mentioned in the advisory has undergone any form of clinical validation. These medicines have not been tested on people infected with 2019-nCoV to study their ability to provide any kind of relief or prevent any infection. Yet, the Ministry has recommended untested medicines to treat a virus about which little is known. Even as the Ministry has issued an advisory to symptomatically manage infected people by providing them Unani medicines, it has not cared to list the symptoms that people infected with the novel virus exhibit. Nor has it mentioned which specific medicine should be taken if a particular symptom is noticed. People infected with 2019-nCoV exhibit a wide range of symptoms. While most have mild symptoms such as a fever and cough, about one in five show more serious symptoms such as pneumonia and respiratory failure. Similar to those who had the Middle East respiratory syndrome caused by another coronavirus, some patients with 2019-nCoV have also had gastrointestinal symptoms, including diarrhoea. The press release is a mishmash of information put together in haste. While the part of the press release detailing Ayurvedic practices states that the "advocacy is for information only and shall be adopted in consultation with registered Ayurveda practitioners only", no such cautionary note is found under the Unani and homeopathy recommendations.

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## Self-Medication Is Dangerous

By recommending Unani medicines and asking people to use them for symptomatic management of the infection, the AYUSH Ministry is encouraging people to self-medicate, which is alarming. With no evidence that the medicines will provide even symptomatic relief, self-medication outside the healthcare system would put those in close contact with each other at grave risk of getting infected. After all, human-to-human transmission from infected cases to close contacts has been documented in China and other countries. In fact, even fourth-generation transmission has been recorded in Wuhan, the epicentre of the disease outbreak. The AYUSH Ministry neither seems aware of the kind of precautions that need to be taken while attending to people with the infection, nor of the fact that 16 healthcare workers who had been wearing protective gear while treating infected persons in China fell ill themselves. When a passenger exhibiting symptoms suggestive of 2019-nCoV is found at one of the 20 Indian airports where thermal screening is being undertaken, will she be quarantined and admitted to a hospital for further testing/treatment or allowed to self-medicate at home with Unani medicines? At a crucial time like this, the Health Ministry and the AYUSH Ministry cannot afford to work at cross purposes.

## Why China Has Emerged as The Epicentre of Global Outbreaks of Disease

→ Several deadly new viruses in recent years have emerged in China — Severe Acute Respiratory Syndrome (SARS), bird flu, and now the novel coronavirus (nCOV). The reason could lie in the busy food markets dotting cities across the country — where fruits, vegetables, hairy crabs and butchered meat are often sold next to bamboo rats, snakes, turtles, and palm civets. Closely packed stalls in busy marketplaces, the Chinese taste for exotic meats, and the high population density of cities create the conditions for the spread of zoonotic infections, experts say.

#### Zoonotic Infections

The relationship between zoonotic pathogens — those of animal origin — and global pandemics is not new. The Justinian Plague (541-542 AD), the Black Death (which started in Europe in 1347), yellow fever in South America in the 16<sup>th</sup> century, the global influenza pandemic in 1918, and modern pandemics such as HIV/AIDS, SARS, and triple-reassortant A H1N1 influenza have one thing in common: the causal organisms came to humans from animals. The World Health Organisation (WHO) estimates that globally, about a billion cases of illness and millions of deaths occur every year from zoonoses, i.e, diseases and infections naturally transmitted between people and vertebrate animals. Some 60% of emerging infectious diseases globally are zoonoses. Of the over 30 new human pathogens detected over the last three decades, 75% originated in animals.

## Animal Markets Everywhere...

"Wherever there is close mixing of humans and animals, especially the unregulated handling of blood and other body products, as happens for example in China's animal markets, there are greater chances of transmission of a virus from animals to humans, and its mutation to adapt to the human body," a senior WHO functionary told The Indian Express from Geneva. It isn't just China, the official said. "It has happened wherever in the world there is unregulated mixing of humans and animals, either wild or domesticated." The official

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referred to the Ebola outbreak in Africa: "There it was wild chimpanzees who had the disease. It came into humans after these were killed and consumed. Animal markets are breeding grounds because there is free interchange of pathogens between species and mutations."

## ...And Especially in China

Dr K S Reddy, former professor of AIIMS and president of the Public Health Foundation of India (PHFI) noted that the majority of new outbreaks and pandemic threats over the past five decades had arisen from microbes transmitted from animals to humans, either directly or through another animal reservoir host. "Proximity to animals grows from wild food markets and captive animal breeding, with deforestation creating a conveyor belt for viruses and vectors to move from wildlife to captive animals, and from them to humans. The wild food markets in China offer both a mix of many animals which harbour deadly viruses, and an opportunity to transmit with ease to crowds of humans whose taste for a diversity of wild as well as close-bred animals provides a conveyor belt for animal-to-human transmission. Once the virus gains entry into humans who travel and transport animals, the infection spreads," Dr Reddy said.

## Ecology of Infections, Spread

With a population of nearly 1.4 billion and 50% of the world's livestock, China's ecology poses a risk for emerging, re-emerging, and novel diseases that could threaten China and the rest of the world, says the US federal agency Centers for Disease Control and Prevention (CDC). "Moreover, the world's growing network of air travel routes dramatically increases the risk for infections to rapidly spread, and for potential pandemics that can cause illness, death, and costly disruption to global trade," the CDC states. The SARS epidemic began in November 2002 in the Guangdong province of southern China, and spread across the world. Bird flu of various provenances — the virus keeps mutating — have been repeatedly reported from China after the first H7N9 novel avian influenza outbreak of 2013. In 2018, a 68-year-old patient from Jiangsu province was infected with H7N4. Last year, there was an outbreak of H5N6 bird flu in Horgos in the far western Xinjiang region.

